

EFFECT OF *YOGA NIDRA* ON MENTAL STATUS AMONG SELF-EMPLOYMENT ASPIRANTS

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ABSTRACT

Yoga nidra is a tool that helps in calming the mind. It is a method which induces relaxation at the physical, mental and emotional levels. Hence, the present study was conducted to study the effects of *Yoga nidra* on mental status of individuals aspiring to be self-employed. A sample size of 60 subjects were included in the study. Selected subjects were randomized into case and control group and assessed. The subjects included were given “*Yoga nidra*” and the control group subjects were given “Supine rest” practice for thirty minutes duration, for 10 days. The data was analysed using appropriate statistical methods. Significant improvement was seen ($p=0.0001$) in positive affect in the *Yoga nidra* group in comparison to supine rest group. *Yoga nidra* is a feasible and cost-effective method which helps in increasing positive mental status in self - employment aspirants.

IndexTerms: *Yoga nidra*, unemployment, mental status, self - employment.

INTRODUCTION

Employment is a necessary part of daily life ¹ and Participation in paid work on a sustained basis is one of an individual's core needs. ² It enhances a person's well-being and also provides scope for personality development. Additionally, employment provides financial security ¹, helps in improving the self-esteem of a person, it also can satisfy creative urges, provides an avenue for achievement and self-realization ³ and may influence health through various pathways. A recent systematic meta-review on employment and mental health showed that “having a job is associated with a greater sense of satisfaction, improved well-being, reduction in symptoms of depression and anxiety, and unique opportunities for personal development and mental health promotion”.⁴ However, these crucial requirements of a person go unsatisfied because of unemployment arising due to global recession.

Unemployment is a state or condition in which individuals do not have work or are seeking employment. ⁵ It is a serious problem plaguing today's world. Unemployment is prevalent in today's world because people lack skills, work experiences and financial resources.⁶ Job loss might have an associated with, the incidence of depression, ⁷ anxiety,⁸ and suicide. ⁹ According to the Global Employment Trends, 2014 unemployment rate was found to be 4.4% in rural area and 5.7% in urban area as of 2015 September. ¹⁰ Globally, the International Labour Organisation (ILO) reckons that the number of unemployed people increased by 3.4 million in 2017 that is number of unemployed persons globally forecast to stand at just over 201 million –and expected to rise to 2.7 million in 2018, and the unemployment rate was raised modestly from 5.7 to 5.8 per cent in 2017 and as the pace of labour force growth outstrips job creation. As predicted by ILO the number of unemployed people in India were raised by 1 lakh in 2017 and expected to rise by another 2 lakhs in 2018. ¹¹ Unemployment is a stressful event which affects the rates of mortality and morbidity. ⁶ To overcome these problems, one of the viable option for jobless youth is to opt for self-employment.

Self-employment is defined as persons operating individual enterprises, employing others or, persons operating or working in household enterprises.¹² Self-employment is an important factor in the economic advancement. Unemployment to self-employment has been linked since ages, and also shows that individuals confronted with unemployment and low prospects for wage-employment will turn to self-employment as a viable alternative. ¹³ Self-employment presents an opportunity for the individual to set his or her own schedule, to work when they like, to answer to nobody and possibly even as a way to become rich. Self-employment will help promote invention and innovation and thus create new jobs; new firms may also raise the degree of competition in the product market bringing gains to consumers. ¹⁴ A longitudinal study shows that, individuals who move from unemployment into work, their mental health tends to improve and also unemployed respondents had poorer mental health than those who were employed. ¹⁵

Stress is considered as a state of emotional as well as mental strain. ¹⁶ Health-related consequences manifest as psychosocial health problems due to loss of income, job-related social contact. ¹⁷ Job stress has adverse impacts on physical and mental health outcomes. It can cause diseases such as insomnia, depression, anxiety and other cardiovascular diseases.¹⁸ Occupational stress is a major problem in the world. ¹⁹

Mental health is an integral and essential component of health. It is a state of well-being wherein an individual realizes their abilities, copes up with the normal life stresses, works productively and is able to make a contribution to the community.²⁰ Mental health problems constitute a varied spectrum ranging from sub-clinical states to severe forms of disorders.²¹ Determinants of mental health and mental disorders include individual facets such as the ability to manage one's thoughts, emotions, social behaviors and interactions as a whole in the society.²² *Yoga nidra* is one such tool that helps in maintaining the mental health.

Yoga nidra is the state of dynamic sleep. It is a method which induces relaxation at the physical, mental and emotional levels²³ and also prepares the mind for *yogic* discipline. During the practice of *Yoga nidra* the consciousness is functioning at the deeper levels of awareness.²³ Hence *Yoga nidra* is often referred to as psychic sleep or deep relaxation with inner awareness. It is a *pratyahara* but also opens door for meditation.²⁴ *Yoga nidra* is a powerful tool which helps in controlling diseases caused due to stress such as insomnia, depression, anxiety.²³ Though integrated *Yoga* therapy has been shown to be useful in reducing the stress levels the effect of *Yoga nidra* on mental health status of self-employment aspirants are not yet explored. Hence the present study aims at exploring the effect of mental status among self-employment aspirants.

OBJECTIVES OF THE STUDY:

The present study will be intended to explore the effect of *Yoga nidra* on:

- Mental status of the self-employment aspirants
- Quality of life in the self-employment aspirants
- Respiratory rate among the self-employment aspirant

METHODOLOGY

Subjects:

Participants were un-employed male and female volunteers, participating in one-month training program under Rural Development Self Employment Training Institute (RUDSETI), Ujire, Dakshina Kannada district, Karnataka.

Source of Data: The subjects were recruited from:

1. Facility of Rural Development Self Employment Training Institute (RUDSETI), Ujire, Belthangady taluk, Dakshin Kannada, Karnataka.
2. Sixty unemployed individuals belonging to both genders aged between 18-35 years were recruited for the study.

Sample size: 108 un-employed volunteers were screened. A sample size of 64 subjects were selected based on the criteria for selection and also inclusion and exclusion criteria.

Inclusion and Exclusion criteria

Criteria for selection: A baseline questionnaire for assessing the stress level was done using perceived stress scale and the total score for the same should have been more than 20.

Measurement of perception of stress: The Cohen Perceived Stress Scale²⁵ (PSS) was used for measuring the perception of stress. It measures the degree to which situations in one's life are appraised as stressful.

Inclusion Criteria:

- Age group between 18 to 35 years
- Gender: both male and female
- Unemployed
- Willing to participate in the trial by signing an informed consent.

Exclusion Criteria:

- Employed individuals
- Psychiatric disorders
- Unemployed individuals with any underlying pathological conditions

Ethical considerations:

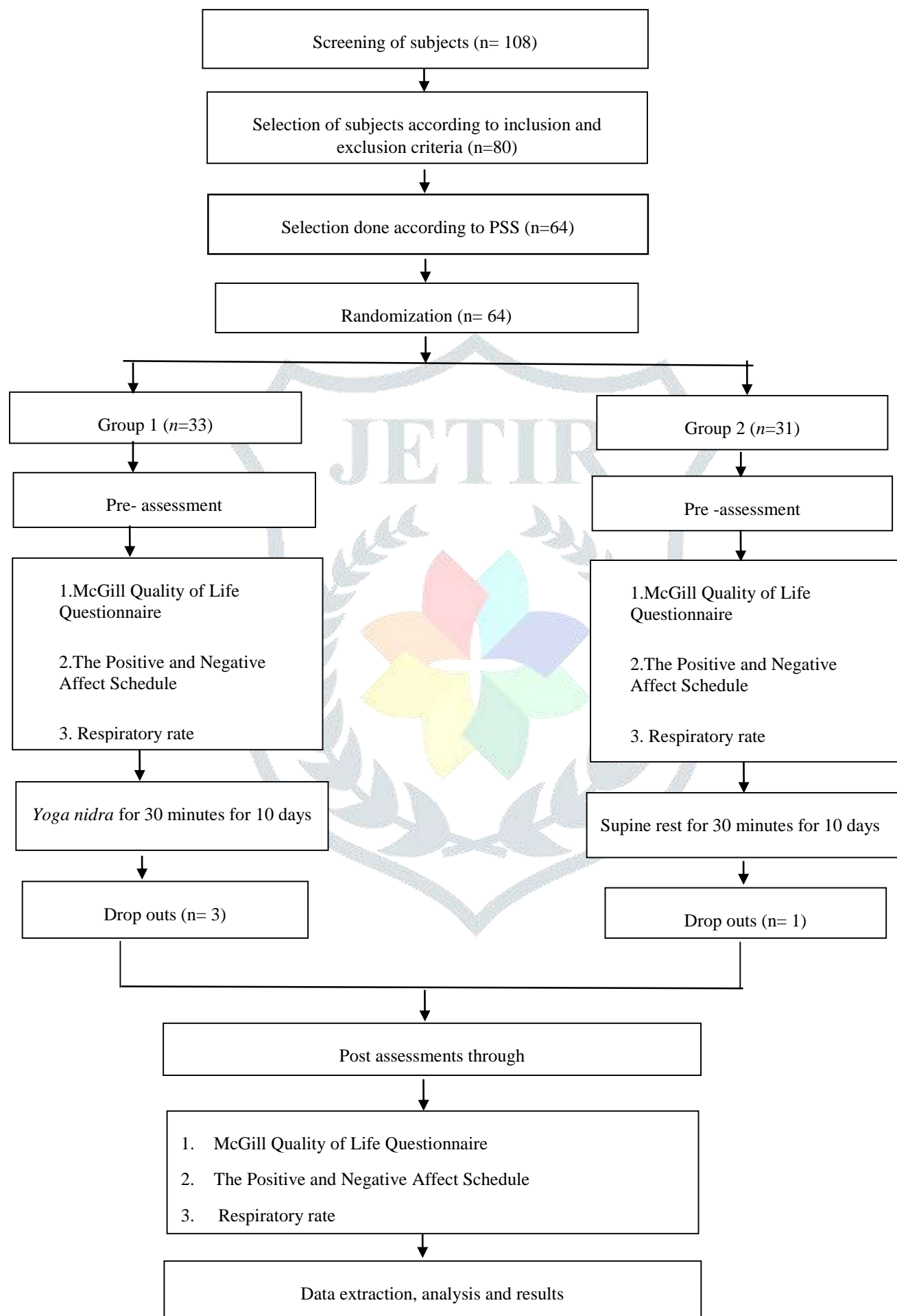
Subjects were verbally explained in detail about the intervention of the study and related assessments in the form of various questionnaires. A signed informed consent was taken from each subject before the commencement of the intervention. The Institutional Ethics committee of SDM College of Naturopathy and Yogic sciences approved this study.

Design:

Randomized control trial

Intervention: *Yoga nidra*: Steps of the *Yoga nidra* practice²³



Trial Profile:

Assessment: Data was acquired at baseline and post-intervention using the following assessment tools:

The Positive and Negative Affect Schedule (PANAS) ^{26,27}

The PANAS is a questionnaire designed to assess Positive and Negative Affect of

an individual. The questionnaire has 20 items, 10 to Positive Affect (e.g., enthusiastic)

and 10 to Negative Affect (e.g., scared). Participants responded to each item on a 5-point Likert-type scale: 1) very slightly or not at all, 2) a little, 3) moderately, 4) quite a bit, and 5) extremely.

RESULTS

The present study was conducted to evaluate the effect of *Yoga nidra* on mental status, among self-employment aspirants. Results were compared between pre and post- intervention after 10 days.

The results, after applying paired t test to compare between pre and post score of positive affect in PANAS in study group showed a mean of pre-test of 23.93 (SD= 4.25) and post-test of 40.17 (SD= 2.90). The degree of changes is -67.83% showing significant increase in positive affect of PANAS ($p= 0.0001$).

The results, after applying paired t test to compare between pre and post score of positive affect in PANAS in control group showed a mean pre-test of 24.80 (SD= 5.93) and post-test of 34.50 (SD= 4.91). The degree of changes is -39.11% showing significant increase in positive affect of PANAS ($p= 0.0001$).

Table 1: Comparison of study and controls with respect to pre-test and post-test scores of Positive PANAS SF by independent t test

Groups	Pretest		Posttest		Difference	
	Mean	SD	Mean	SD	Mean	SD
Study	23.93	4.25	40.17	2.90	16.23	3.50
Control	24.80	5.93	34.50	4.91	9.70	6.61
% of change in Study					67.83%#, $p=0.0001^*$	
% of change in Control					39.11%#, $p=0.0001^*$	
t-value	-0.6504		5.4410		4.7853	
p-value	0.5180		0.0001*		0.0001*	

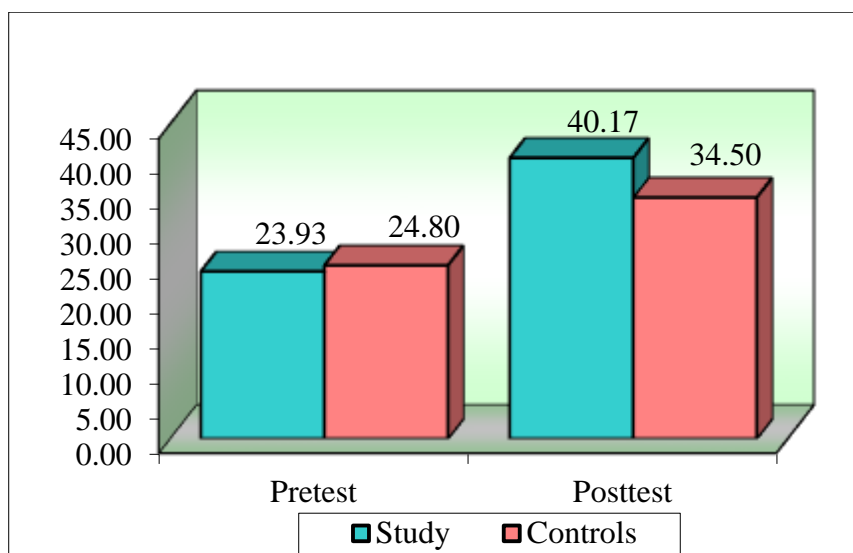


Figure 1: Comparison of study and controls with respect to pre-test and post-test scores of Positive PANAS SF

The results, after applying paired t test to compare between pre and post score of negative affect in PANAS in study group showed a mean of pre-test of 21.90 (SD= 2.76) and post-test of 38.43 (SD= 5.38). The degree of changes is 75.49% showing increase in negative affect of PANAS ($p= 0.0001$).

The results, after applying paired t test to compare between pre and post score of negative affect in PANAS in control group showed a mean of pre-test of 22.57 (SD= 3.47) and post-test of 33.83 (SD= 4.28). The degree of changes is 49.93% showing increase in negative affect of PANAS ($p= 0.0001$).

Table 2: Comparison of study and controls with respect to pre-test and post-test scores of Negative PANAS SF by independent t test

Groups	Pre-test		Post-test		Difference	
	Mean	SD	Mean	SD	Mean	SD
Study	21.90	2.76	38.43	5.38	16.53	5.83
Control	22.57	3.47	33.83	4.28	11.27	5.55
% of change in Study					75.49%#, $p=0.0001^*$	
% of change in Control					49.93%#, $p=0.0001^*$	
t-value	-0.8236		3.6637		3.5853%#, $p=0.0001^*$	
p-value	0.4136		0.0005*		0.0007*	

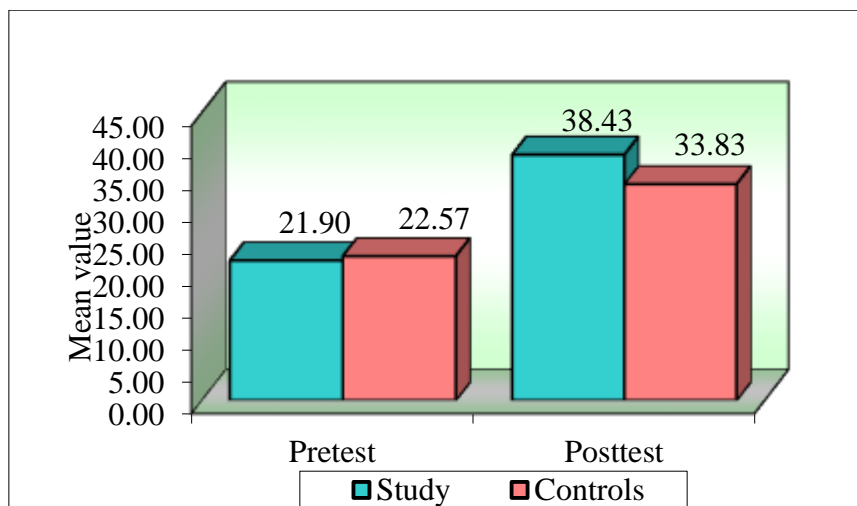


Figure 2: Comparison of study and controls with respect to pre-test and post-test scores of Negative PANAS SF

Discussion:

Participation in *Yoga nidra* for 10 days has significantly influenced the mental status among the subjects. *Yoga nidra* is a technique which helps in reducing the sympathetic activity and improving the parasympathetic activity by simultaneously increasing cortical arousability and reducing limbic arousability. This improves perceptual awareness and reduces emotional reaction. This regulatory mechanism balances hypothalamus to maintain homeostatic state during the practice of *Yoga* as stated by Manish et al.²⁸ So, in the present study this might be the reason for predominant dominance of parasympathetic nervous system (PNS) which helped in significantly increasing the positive affect of PANAS score. *Yoga nidra* also increases GABA by stimulating vagal afferents which increases activity of PNS which correlates to increase in mood.²⁹ Additionally, *Yoga nidra* will help strike a balance between psychic and vital channels (*nadis*) by providing profound muscular, mental and emotional relaxation. Free flow of these energies forms the basis of optimal physical as well as mental health.²³ The same must also be the reason in the present study for the balance between psychic and vital channels after following *Yoga nidra* practise thereby showing an improvement in the mental status.

The most effective means of training the mind is by *Sankalpa*. With each practice of *Yoga nidra* we are made to take a *sankalpa* or resolution. *Sankalpa* takes form of short mental statement which is impressed on the subconscious mind, when one is calm and relaxed this helps one to bring changes in one's personality and life.²³ In the present study *sankalpa* might have also had an effect on significantly increasing the positive affect of mental status.

The present study analysis the negative affect of PANAS as well. There was increase in the negative effect of PANAS scores in both the Study and control group. This might be due to the effect that during the practice of *Yoga nidra*, the mind gradually becomes one-pointed or focused. *Yoga nidra* prevents complete withdrawal of consciousness resulting in concentrating on auditory channels and preventing sleep due to effect of pratyahara (withdrawal of the senses), which on continuous practice leads to more advanced states such as *Dharana* (concentration) and *Dhyana* (meditation). This is one of the higher states in the practice and it requires a lot of training to reach this state of mind²³. Hence in the present study the duration of *yoga nidra* (10 days) practice is very short and another reason might also be that the target population in this study were already unemployed and hence stress remains high in them, and such population may show higher sensitivity towards relaxation technique like *yoga nidra*,³⁰ this might have also been the reason why there was an impact on the negative effect on the negative affect scores of PANAS.

CONCLUSION

The present study was conducted to evaluate the effects *Yoga nidra* on mental status among self-employment aspirants. The outcome variables showed a significant increase ($p=0.0001$) in positive affect after 10 days of the practise. The study throws light on the various possible mechanisms that are involved in the regulation of emotions by practice of mindfulness as well as relaxation technique. The result findings can be helpful in treating various mental illness in association to job loss. Further, no report of mental distress or physical pain was reported by any of the participants during the session. Thus, we can conclude that *Yoga nidra* is a safe and efficient mode of therapy for the overall improvement in the mental status among self-employment aspirants.

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