

**Effect of SMET yoga program on Positive and Negative Affectivity
of employees; a randomised controlled study.**

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Abstract

Background :

This study seeks to investigate the impact of Self-Management of Excessive Tension (SMET) yoga program on changes in Positive and Negative affectivity of the employees.

Materials and methods: It is a randomised two group (yoga and control group) intervention study with pre and post assessments. SMET yoga program is used as an intervention. A sample of 240 employees (120-Yoga and 120-Control group) consisting of both male and female, working for a BPO office in Bengaluru, India belonging to an age group of 20-45 years participated in the study. PANAS scale was used to administer the study parameters. Data was analysed by using SPSS software.

Results: A considerable variation in mean values (difference in pre and post data) were observed after SMET intervention for various dimensions of Positive Affectivity and Negative Affectivity Schedule (PANAS). The results were found to be significant with $p < 0.05$.

Conclusions: Study showed that SMET helped to increase Positive affectivity and to reduce the Negative affectivity of the employees.

Key words: Cyclic Meditation, Negative Affectivity, Personality Traits, Positive Affectivity, SMET, Yoga

Background:

The word "personality" originates from the Latin word *persona*, which means mask (Stevko, 2014). In French, it is equivalent to *persona*. Personality also refers to the pattern of thoughts, feelings, social adjustments, and behaviours consistently exhibited over time that strongly influences one's expectations, self-perceptions, values, and attitudes (Srivastava & Mishra, 2016). It also predicts human reactions to other people, problems, and stress.

Personality affects all aspects of a person's performance, even how he reacts to situations on the job. Not every personality is suited for every job position, so it's important to recognize personality traits and pair employees with the duties that fit their personalities the best. This can lead to increased productivity and job satisfaction, helping your business function more efficiently.

Introduction:

Positive Affectivity:

Positive Affectivity (PA) is a personality characteristic that describes how humans experience positive emotions while interacting with others and with their surroundings. Those with high positive

affectivity are typically enthusiastic, energetic, confident, active, and alert. Those having low levels of positive affectivity can be characterized by sadness, lethargy, distress, and un-pleasurable engagement (Watson et al, 1988).

Positive affect reflects neither a lack of negative affect, nor the opposite of negative affect, but is a separate, independent dimension of emotion. Positively affected people are said to be more active physically, socially, mentally and emotionally (Watson & Tellegen, 1988a).

Positive affectivity is a managerial and organizational behavior tool used to create positive environments in the workplace. Through the use of PA, the manager can induce a positive employee experience and culture. The positive affectivity hypothesis predicts that employees with positive dispositions receive more supervisor support because they are more socially oriented and likable. PA can be measured as both a state and a trait; state affect captures how a person feels at any given time while trait affect is the tendency of a person to experience a particular affective state over time (Watson and Pennebaker, 1989).

PA helps individuals to process emotional information accurately and efficiently, to solve problems, to make plans, and to earn achievements. Psychological capital (PsyCap) refers to an individual's positive psychological state of development and is characterised by positive affectivity, self-efficacy, hope, resilience, and optimism.

PA may influence to enhance the personal resources which can help to overcome or deal with distressing situations. These resources are physical (e.g., better health), social (e.g., social support networks), intellectual and psychological (e.g., resilience, optimism, and creativity). PA provides a psychological break or relief from stress, supporting continued efforts to replenish resources depleted by stress. Its buffering functions provide a useful antidote to the problems associated with negative emotions and ill health due to stress. Likewise, happy people are better at more mature coping efforts than people with negative emotions.

Negative Affectivity:

Negative Affect (NA) is a dimension of subjective distress that includes a variety of adverse mood states, including anger, contempt, disgust, fear, and nervousness (Watson et al., 1988). NA, like PA, can be measured as both a state and a trait and has been linked to both subjective and objective health indicators. State NA has been linked to increased same-day pain (Gil et al., 2003) and decreases in self-reported health (Benyamini et al., 2000). Evans and Egerton (1992) found that state NA led to a higher incident of

colds. Burnout is a negative affective state caused by recurring distress (Shirom, 1989). Negative affectivity is a stable and inherited disposition to experience nonspecific distress or unpleasant emotions (Clark et al. 1994). It is considered by some to be synonymous with the personality factor of neuroticism, which corresponds to individuals' tendency to experience negative affect states (Costa and McCrae 1980; Watson et al. 1988a).

It is important to an organisation that its employees must be emotionally balanced. The greatest competitive advantage for an organisation's economy is a positive workforce. Therefore it is important for organisations to find ways to enhance their employees' positive psychological states of mind and decrease their negative emotions i.e. their psychological capital, to achieve desired organisational outcomes.

Negative affectivity (NA) is a personality variable that involves the experience of negative emotions and poor self-concept. Watson and Clark (1984) proposed that negative affectivity encompasses a range of constructs including trait anxiety, neuroticism, ego strength, and maladjustment, among others. Negative affectivity roughly corresponds to the dominant personality factor of anxiety/neuroticism that is found within the Big Five personality traits as emotional stability. Neuroticism can plague an individual with severe mood swings, frequent sadness, worry, and being easily disturbed, and predicts the development and onset of all common mental disorders. Research shows that negative affectivity relates to different classes of variables such as, self-reported stress and poor coping skills, health complaints, and frequency of unpleasant events. Weight gain and mental health complaints are often experienced as well.

Negative affectivity is considered a general risk factor for a range of physical and mental health problems, which frequently co-occur. For example, someone experiencing one negative mood state (e.g., sadness) is likely to report greater levels of other negative mood states such as fear or anger (Watson and Naragon-Gainey 2010). As a trait, negative affectivity is considered a broad predisposition to experience negative emotions such as anxiety, fear, and sadness (Watson et al. 1988b). Indeed, negative affectivity is associated with a range of psychopathology, including eating disorders (Cook et al. 2014; Stice 2002), substance use disorders (Cook et al. 2014), schizophrenia spectrum disorders (Blanchard et al. 1998), personality disorders (Zeigler-Hill and Abraham 2006), and a variety of health concerns (Watson and Naragon-Gainey 2014). Additionally, negative affectivity is theorized to play an etiological role accounting for the overlap in negative emotional disorders of anxiety and depression (Clark and Watson 1991).

Further, negative affect was identified as one of five “core elements” of personality along with detachment, antagonism, disinhibition, and psychoticism (Krueger et al. 2012), emphasizing the role of negative affectivity not only in personality disorders but also personality at a broader level. Notably, negative affectivity is theorized to be a preexisting temperamental disposition, occurring prior to the onset of specific pathology. Prospective studies have found negative affectivity to predict later onset of a range of problems including mental health, hypertension, and substance abuse (Craske et al. 2001; Jonas and Lando 2000; Measelle et al. 2006; Pine et al. 1998). Overall, available works suggest negative affectivity is a consistent marker of distress across a range of presenting problems and plays an etiological role in their onset.

Hence employees having more negative affectivity trait cannot use their maximum potential and hence will find it difficult to give their fullest to the organization. Therefore these employees may be assisted to decrease their negative affectivity, so that they would be able to work more efficiently and contribute positively to the growth and success of the organization.

Stress Management programs (SMP) are conducted in organisations to help employees to overcome physical and mental imbalances. Though everyone is unique, we all possess certain traits that set us apart from the rest, for many reasons. These traits define who we are and how we respond to situations. We only need to ignite that dormant passion and give a boost to our persona.

The Stress Management programs assists individuals to effectively manage the imbalance in healthy ways, including - exercising, seeking social support, using pleasant activities and relaxation techniques.

The Stress Management training program in the workplace builds on the better Work-Life balance.

Studies on Stress Management programs suggests that these comprehensive programs can improve mental health, behaviour and well-being of workers.

Previous research studies have proved that yoga techniques can bring down the imbalances enormously. Self-Management of Excessive Tension(SMET) is one such holistic yoga-based stress management program developed by Swami Vivekananda Yoga AnusandhanaSamsthana (S-VYASA) University, Bengaluru. It is a simple and easy technique to practice which is based on traditional concept of yoga for improving both internal and external well-being of an individual. It is specially suited to the modern day executives, professionals, management experts, housewives and others.

YOGA:

Yoga is a conscious process of gaining mastery over the mind. It's a process of elevating oneself through calming of mind.

The great sage **Patanjali** 'father of yoga' uses the word 'Klesha' in his 'Yoga Sutras' for stress and proposes the techniques of yoga for reducing (thinning) stress. It will not be a sudden elimination but gradual systematic process of moving from higher stress levels to lower ones and slowly eliminating.

According to 'Bhagavadgita' (2 - 62, 63), by using the technique of yoga, we learn to expand our horizons, increase our capacities and manifest our dormant potentialities.

Hence yoga is one of the popular ways to reduce physical and mental imbalances to a greater extent. It helps to set right the defects in different koshas. The negative emotions like Negative Affectivity can be minimised which helps to develop confidence, to increase optimism, enthusiasm and other positive characters. An employee with more positivities, tries to improve his performance and in turn strives for the growth of the organisation and also helps to achieve its goals and targets.

Benefits of Yoga :

Yoga offers man a conscious process to solve menacing problems of unhappiness, restlessness, emotional upset, hyper-activity and so on.

It helps to evoke the hidden potentialities of man in a systematic and scientific way by which man becomes a complete individual. His physical, mental, emotional, spiritual and intellectual faculties develop in a harmonious and integrated manner to meet the all-round challenges of the modern technological era with its hectic speed.

It also helps for muscular relaxation, developing willpower and improving creativity.

SMET- Self-Management of Excessive Tension

Self-Management of Excessive Tension (SMET) module is a holistic yoga-based stress management program which is developed by Swami Vivekananda Yoga AnusandhanaSamsthana (S-VYASA) University, Bengaluru. It is a simple and easy technique to practice which is based on traditional concept of yoga for improving both internal and external well-being of an individual. It is specially suited to the modern day executives, professionals, management experts, housewives and others. Yoga offers total rehabilitation by integrated module of SMET.

SMET is based on Māndukya Upanishad consisting of Yogic science and Vedic ideology for combating physical and mental imbalances and ensuring all round health of the body and mind combined. It is a series of successive stimulations and relaxations that can solve the complex problems of the mind. It helps to release stress at deeper levels. This technique is interspersed and an aspirant finds it easy in comparison with other practices of yoga.

The cardinal principles of Yoga are; “stimulation and relaxation of the body; slow down the breath and calm down the mind”. Crystallizing such principles into practical techniques, S-VYASA has developed highly effective programs of stress management, offered under the following four headings:

1. Instant Relaxation Technique (IRT)
2. Quick Relaxation Technique (QRT)
3. Deep Relaxation Technique (DRT)
4. Self Management of Excessive Tension (SMET)

Aim and Objectives of SMET:

1. Stimulate the mind.
2. Calm down the distractions.
3. Recognize the Stagnations.
4. Achieve peace and happiness.
5. Enhancing the efficiency of staff involved in management and other stream
6. Promoting health and wellbeing through yoga
7. Recovering and managing various physical and mental ailments through specific yoga techniques.
8. Improving the skills and equipoise in action by developing concentration and absolute focus towards work through various Yoga techniques.

Components of SMET :

- (a) **Theory sessions** - namely Lectures, Talks, Counselling, Discourses and
- (b) **Practice sessions** - Cyclic Meditation (CM) which includes Āsanas, Relaxation techniques and Meditation.

So by reducing the imbalance, one can maximize his potential and work with a healthy and positive state of mind. Keeping this aspect as a rationale, efforts have been made to improve the positive characters of employees and to minimize their negative characters.

Previous research studies have proved that yoga techniques can bring down the Negative affectivity and improve positivity enormously. Self-Management of Excessive Tension (SMET) is one such holistic yoga-based stress management program developed by Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA) University, Bengaluru, which has been used as an intervention in our study.

Aim:

To study the impact of SMET yoga module on positive and negative characteristics of employees.

Objective:

- To evaluate the impact of SMET yoga module on Positive affectivity of employees.
- To evaluate the impact of SMET yoga module on Negative affectivity of employees.

Hypothesis:

Null Hypothesis: SMET Yoga Module will not improve Positive affectivity and will not reduce Negative affectivity of the employees.

Research Hypothesis: SMET Yoga Module will improve Positive affectivity and will reduce Negative affectivity of the employees.

Research Methodology:-**Research Design:**

It is a randomised two group (yoga and control group), intervention study with pre and post assessments. SMET program is used as an intervention. Yoga group will undergo SMET yoga program and Control group will be engaged in their routine work and they will undergo SMET program after the study. It will be a waitlist control group.

Measures:-

Dependant variables– Positive affectivity and Negative affectivity

Independent variable –Job stress

Control Variables – Age, Gender, Qualification, Designation, Job Tenure**Research Instruments used:**

PANAS scale- developed by Watson, D., Clark, L. A., & Tellegen, A., (1988) - measures 10 specific positive and 10 specific negative affects each at two different levels. It uses a 5-point scale (1 = very slightly or not at all, 5 = extremely) to indicate the extent of generally feeling the respective mood state. The Authors calculated Cronbach á coefficients in different samples range from 0.90 to 0.96 for PA and from 0.84 to 0.87 for NA.

Reliability and Validity:

Reliability and Validity reported by Watson (1988) was moderately good. For the Positive Affect Scale, the Cronbach alpha coefficient was 0.86 to 0.90; for the Negative Affect Scale, 0.84 to 0.87. Over a 8-week time period, the test-retest correlations were 0.47-0.68 for the PA and 0.39-0.71 for the NA. The PANAS has strong reported validity with such measures as general distress and dysfunction, depression, and state anxiety.

Samples :

Source – The sampling technique used in this research is simple random sampling. Employees working for Vee-Technologies private Ltd., a BPO organisation at Bengaluru, India were selected randomly for the study. Subjects of the present study were from different departments of the organization like finance, HRM, production etc. and they belonged to the category of managers, non-managers and official staff of the organization.

Criteria - Both male and female employees of 20 to 45 years of age group were selected.

Size - Total of 240 employees participated in the study, out of which 120 belonged to ‘experimental Yoga group’ and 120 belonged to ‘waitlisted Control group’.

Duration of the study :3 months, weekly 2 days, one hour session per day. Employees were asked to practice the same at home for the remaining 3 days of the week by listening to the instructions which were recorded by them. They self-reported their home practice.

Statistical Analysis: Statistical Package for Social Sciences (SPSS) 22.0 was used to perform the statistical analysis.

Results / Findings:

The response choices of the scale used, consisted of a Likert type 5 point rating scale.

As the data consists of scores given to the response choices, the variables under measurement are not normally distributed. Hence analysis was made using non-parametric tests. The Mann -Whitney U test is used to measure the significance of the data.

Table 1 shows the Descriptive Statistics of the PANAS of the employees of Yoga group.

In this table we can see that there is a significant change in the mean values of post data compared to pre data of all the variables. This implies that SMET has a positive impact in improving the positive characters and reducing the negative characters of the employees.

Table 2 shows median, mode and percentile values for yoga group of employees.

Table 3 shows the Descriptive Statistics of the PANAS of the employees of Control group.

In this table, there is not much difference in the mean values of the variables of pre and post data of the employees who have not participated in the SMET Yoga program.

Table 4 shows median, mode and percentile values for Control group of employees.

Table 5 shows the Mean Ranks and the sum of Ranks for PANAS of the Yoga group - employees.

In this table we can see that there is a tremendous change in the mean Ranks and sum of Ranks of post data compared to pre data of all the variables. This proves the positive effect of SMET in improving the positive characters and reducing the negative characters of the employees.

Table 6 shows the Mean Ranks and the sum of Ranks for PANAS of the Control group - employees.

In this table, there is not much difference in the mean Ranks and sum of Ranks of the variables of pre and post data of the employees who have not participated in the SMET Yoga program.

Table 7 shows the actual significance values of the test for PANAS of employees of Yoga group.

This table clearly shows the significance of data of each dimension of PANAS of Yoga group. Since the P value is < 0.05 in each case, it means to say that, Reject Null Hypothesis and Accept Research Hypothesis.

The post data of different variables of Control group were not found to be significant for PANAS (p not less than 0.05) as per our observation.

SMET has a positive impact on all the variables of PANAS. SMET has helped the employees in improving their Positive (characters) Affectivity and to reduce their Negative (emotions) Affectivity to a maximum extent.

Discussions :**Previous studies and research findings about SMET :**

A study on SMET, reported decrease in occupational stress levels and baseline autonomic arousal in managers, showing significant reduction in sympathetic activity (Vempati, R. P., and Telles, S. (2000)). Effectiveness of Self- Management of Excessive Tension (SMET) programme on emotional well-being of managers was studied.. In this study, Emotional Quotient was used as an indicator for emotional well-being. SMET intervention contributed to the betterment of emotional well- being of the managers (Sony Kumari, N.C.B. Nath, and Nagendra, H. R. (2007)). A study was made to assess the effect of Self-Management of Excessive Tension (SMET), on brain wave coherence. Results of a study showed that participation in a SMET program was associated with improvement in emotional stability and may have implications for 'Executive Efficiency'. On the whole, significant increase in cognitive flexibility, intelligence and emotional stability were attained by following SMET (Ganpat, T. S., and Nagendra, H. R. (2011)) .A study examined the possibility of enhancing emotional competence (EC) along with emotional Intelligence (EI) through Self Management of Excessive Tension (SMET) program. The participating executives reported improvement in efficiency at work. In addition they have experienced other benefits like reduction in blood pressure, sleep decreases in the consumption of the tranquilizers, clarity in thinking, and relaxed feeling in action (Kumari, S., Hankey, A., and Nagendra H. R. (2013)). In another study, SMET intervention has again proved to contribute to significant enhancement of emotional competence level of the managers (Sony Kumari, N.C.B. Nath, and Nagendra, H. R. (2007)). A study evaluates the impact of a 5 day stress management programme (SMET) for managers as measured by AcuGraph3 - 'Digital Meridian Imaging' system. The 5 days SMET intervention increased overall 'Prāṇic'energy in the main acupuncture meridian channels. The program significantly improved overall chi (Chinese term) energy. Chi energy would increase, both in individual meridians and the overall (Meenakshy K. B., Alex Hankey, Hongasandra Ramarao Nagendra. (2014)). A study was conducted to evaluate the effect of 5 days yoga based Self-Management of Excessive Tension (SMET) on profile of mood states of managers. The negative moods were significantly reduced following SMET program. Whereas positive moods improved. The intense yoga based SMET program enhanced the profile of mood in managers (Rabindra M.A., Pradhan B. and Nagendra H.R, (2014)). SMET intervention with an insight of group dynamics & executive growth along with the practices proved to bring about a significant trend in scores which suggested that SMET as part of Yoga could be an effective tool for managing stress and hence enhancing managerial leadership (Padmavati Maharana, Dr Sanjib Patra , Dr. T M Srinivasan, Dr. H R Nagendra,. (2014)). A study was conducted to examine the effect of Stress Management Programme, Self- Management of excessive Tension (SMET) on the managers. It was observed that significant improvement in health and personality traits were recorded (Rabindra Acharya, Balram Pradhan and H. R.

Nagendra (2017)). Effect of SMET Programme showed to improve the attention of top line managers in another study (Shatrughan Singh and Nagendra, H. R. (2012)).

Findings from the present study:

In this study, 2 sub-scales were studied with the help of PANAS scale.

It was observed that some positive changes happened in the employees who underwent SMET program as mentioned below for each sub-scale or component.

Negative affectivity :Employees complaining about distress, upset, guilty, scare, hostile, irritability, ashamed, nervous, jittery or afraid became more confident, open minded, optimistic and also their participation and involvement increased to a greater extent after going through the SMET programme.

Positive Affectivity: The interest, excitement, strength, enthusiasm, pride, alertness, inspiration, determination, attentiveness, activeness and self-motivation of the employees improved noticeably who underwent SMET programme.

In total, this study has proved that SMET helps in improving the Positive affectivity of employees to a noticeable extent. It has also showed that the SMET has helped to a large extent in reducing the Negative affectivity of the employees to a minimum level which in turn increased their positivities.

Advantages of going through SMET Program :

This methodology has been formulated after years of in-depth study and research into actual case histories by highly qualified doctors and yoga experts. Professionals need sensitivity, brilliance and creativity. But in the process of career advancement one's stress levels rise and this ultimately leads to deteriorating health. Also any activity related to computer leads to Musculoskeletal, Emotional and Visual problems. With SMET all these issues can be avoided or managed if they occur.

Over the last 25 years, these programs have been conducted at various business houses, factories, industries, and educational institutions, management development institutions and for the common public in general. Course participants have experienced deep relaxation resulting in great calmness of mind and body during the programs. Preliminary investigations have demonstrated the efficacy of this program in handling stress effectively.

The program ushers in a new era in that, it brings about a 'Turn around' in the participant's outlook, both official and personal and propels him along the path of progress towards efficiency, physical & mental equipoise. SMET improves the sharpness of the mind which is the decision making machinery, by inculcating techniques that help one to go to deeper and subtler levels of consciousness and gain mastery over the mind. It helps to provide the much needed - but denied unwittingly - relaxation to the body-mind complex and to break the shackles of baser thoughts besides elevating one to unlimited expansiveness of understanding - Dr. H. R. Nagendra of S-VYASA university, Bengaluru ; founder of this module.

Importance of Positive and Negative affectivity of an employee for an organisation:

Personality traits are extremely important in today's competitive organisational setting. Employees individually possess diverse personality traits that may influence negatively or positively their performance of jobs assigned to them. It is therefore important that managers and organisational members take into account these important individual differences because realising these traits will help managers and colleagues to deal with employees' job performance.

Personality has received much attention from the research community in many contexts. In recent decades research on personality traits and its exploration in the context of work behavior has been revitalized . Personality trait is relatively stable and enduring individual tendency of reacting emotionally or engaging in a behavior in a certain way. Hence Personality traits reflect people's characteristic patterns of thoughts, feelings, and behaviors. Here we study about two most important personality traits namely Positive affectivity and Negative affectivity of employees in an organisation.

Conclusion:

Self-Management of Excessive Tension (SMET) program deals with the employees (human beings as a whole), by approaching them in a holistic way to minimize their problems related to various areas of an organisation. SMET Program is exclusively and extensively developed for those having physical and mental imbalances due to various reasons such as work pressure, job stress and so on in specifically corporate world. The techniques are simple but very much effective if practiced regularly. In a very short span of time, the program helps to acquire the power to perform better, free from stress in a relaxed and balanced way. From this study we can see that SMET program contributes considerably to improve the positive behaviour of the employees and reduce their negativities at the same time. Hence it is suggestive that SMET intervention is a very effective way of enhancing employees' potential to get the maximum benefit out of them and also to enhance their persona.

Limitations of the study:

Although the study provided interesting insights, the study also has shortcomings.

Firstly, the measures used in the study are self-report measures, which typically suffers the problem of a social desirability effect. Many a times, participants choose an ideal alternative instead of the truth.

Secondly, this study is restricted to a private BPO organisation and the findings are provisional and cannot be generalized to other organizations in the same sector as well as to other sectors. Thus, the external validity of the study is low.

Thirdly, the study has been conducted with a sample size of 120 respondents. More appropriate results could have been obtained if sample size would have been increased.

In this study, three months intervention was given. Intervention period can be increased. Only one company /organization was studied. Studies can be conducted at different organisations. This could give stronger findings.

The study would have brought more good results if the comparative analysis would have been made between males and females and between different variables. Some more demographic variables would have been selected to make the study more detailed one.

Scope for future research :

Some moderator and mediator variables like age, experience or gender variables can be considered to study the parameters and their consequences. Other possible negative consequences can also be studied to enrich this field of research.

Future researchers may also wish to develop their own set of questionnaires. Future research can replicate the methodology adopted in the present study to other sectors. More studies can be carried out to find out the extent to which personality traits influences other perceptions of the organisation. The development of scientific and practical tools and techniques to implement the above findings can be a future initiative.

Conflict of Interest Statement:

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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TABLES

Table 1 : PANAS – Yoga – Descriptive Statistics

Descriptive Statistics								
	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
Posit_pre	120	10	11	21	15.54	0.162	1.777	3.158
Posit_post	120	9	40	49	44.79	0.168	1.842	3.393
Negat_pre	120	9	40	49	44.60	0.162	1.770	3.133
Negat_post	120	9	11	20	15.28	0.152	1.670	2.789
Valid N (listwise)	120							

*Posit_pre – Positive Affect pre data values, *Posit_post - Positive Affect post data values

*Negat_pre –Negative Affect pre data values, * Negat_post - Negative Affect post data values

Table 2 : PANAS – Yoga –Statistics

Statistics					
		Posit_pre	Posit_post	Negat_pre	Negat_post
N	Valid	120	120	120	120
	Missing	0	0	0	0
Std. Error of Mean		0.162	0.168	0.162	0.152
Median		16.00	45.00	44.50	15.00
Mode		16	45	43	16
Percentiles	25	14.00	43.00	43.00	14.00
	50	16.00	44.50	44.50	15.00
	75	17.00	46.00	46.00	16.00

Table 3 : PANAS –Control – Descriptive Statistics

Descriptive Statistics								
	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
Posit_pre	120	10	11	21	15.38	0.166	1.820	3.312
Posit_post	120	10	11	21	15.41	0.175	1.916	3.672
Negat_pre	120	9	40	49	44.55	0.162	1.777	3.157
Negat_post	120	9	40	49	44.67	0.163	1.789	3.199
Valid N (listwise)	120							

Table 4 : PANAS –Control –Statistics

Statistics					
		Posit_pre	Posit_post	Negat_pre	Negat_post
N	Valid	120	120	120	120
	Missing	0	0	0	0
Std. Error of Mean		0.166	0.175	0.162	0.163
Median		15.00	15.00	44.00	45.00
Mode		16	15	43	43 ^a
Percentiles	25	14.00	14.00	43.00	43.00
	50	15.00	15.00	44.00	45.00
	75	16.00	17.00	46.00	46.00

Mann Whitney U Test - Independent samples :

Table 5 : PANAS – Yoga group – Friedman’s Two way Analysis of Variance by Ranks

Variable	N	Mean rank	Sum of Ranks	Variable	N	Mean rank	Sum of Ranks
Posit_pre	120	1.53	183.6	Posit_post	120	3.55	426
Negat_pre	120	3.45	414	Negat_post	120	1.47	176.4

Mann Whitney U Test - Independent samples :

Table 6 : PANAS – Control group – Friedman’s Two way Analysis of Variance by Ranks

Variable	N	Mean rank	Sum of Ranks	Variable	N	Mean rank	Sum of Ranks
Posit_pre	120	1.48	177.6	Posit_post	120	1.52	182.4
Negat_pre	120	3.49	418.8	Negat_post	120	3.51	421.2

Table 7 : Hypothesis Test statistics summary

N = 120	
Degrees of freedom = 3	
Exact significance – 2*(1-tailed sig) = 0.00	
Variable	Asymptotic Significance (2 sided Test) = 0.00
Posit_post	0.00
Negat_post	0.00