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## Evaluation of Emotional Dimensions of the Subjects Practicing Integrated Yoga.

Sindhu R, and Vinay AV\*.

Department of Physiology, PES Institute of Medical Science and Research, Kuppam, Andhra Pradesh, India.

### ABSTRACT

Emotional intelligence (EI)/Emotional quotient (EQ) is the ability to monitor one's own and others' thinking and actions. EI is related to quality of life. To assess the effect of the Integrated Yoga module on emotional dimensions of the participants. The study includes 30 subjects between 20-60 years of age who came to Prasanti Kutiram for yoga practice and 30 age matched controls. In this study the EQ test developed by Prof N. K. Chadha which was standardized and validated with reliability of 0.94 and validity of 0.92 was given to all the subjects on admission to SVYASA which measure emotional dimensions of emotional competency, emotional maturity and emotional sensitivity. All the subjects of this study participated in asanas, pranayama, cyclic meditation, notional correction, devotional sessions, supervised practice sessions (by trained experts) for one hour daily. After one week of integrated yoga therapy, same questionnaire was given to subjects. Same questionnaire was also given to control group after one week without any intervention. EQ analysis (n=30) showed significant increase ( $P < 0.001$ ) in maturity and competency ( $r = 0.233, 0.371$  respectively) and decrease in sensitivity after intervention as compared with pre intervention among the participants, whereas no difference was found in any emotional aspects among the controls before and after the test was performed. Significant increase in EQ in the present study suggests that participants may strike a balance between emotion and reason, are aware of their own feelings, show empathy and compassion for others, and have high self-esteem. Yoga enhances the EQ of the participants which helps them balance emotion and reason.

**Keywords:** Emotional quotient, Emotional intelligence, Yoga

*\*Corresponding author*



## INTRODUCTION

Emotional intelligence (EI)/ Emotional quotient (EQ) is the ability to monitor one's own and others' thinking as well as actions. Conceptually, emotional intelligence effectively supplements cognitive intelligence to predict superior performance through its dimensions of self-appraisal, self-regulation, motivation, empathy, and social skills [1].

Emotions are triggered when the persons environmental relationships changes. The optimal social functioning depends on the ability to perceive, understand and manage emotions. Thus, managing emotions effectively enables the person to express appropriate emotions in socially acceptable way. Emotional abilities (to perceive, understand and manage emotions) are required for developing better quality relationships. EI involves processing of emotion relevant information and the ability to use emotions in reasoning in order to solve problems [2,3].

According to John Mayer and Peter Salovey emotional intelligence is the ability to accurately identify and understand one's own emotional reactions and those of others. It also involves the ability to regulate one's emotions to use them to make good decisions and to act effectively. Further, Reuven Bar-On defined emotional intelligence as being concerned with effectively understanding oneself and others, relating well to people and adapting to and coping with the immediate surroundings to be more successful in dealing with environmental demands. Daniel Goleman defined emotional intelligence as a capacity for recognizing our own and others feeling for motivating our self and for managing our emotions, both within ourselves and in our relationship<sup>4</sup>. Knowing one's emotions and feelings as they occur, and tuning one's self to the changed situation, requires the emotional competency, emotional maturity and emotional sensitivity [4].

Emotional competence can be defined as an individual difference in how effectively people deal with emotions and emotionally charged problems [5].

People with better social and interpersonal relationships will have higher levels of life satisfaction and quality of life and lower levels of depression [6].

When a person can effectively manage his personal, social and environmental change by coping with immediate situation by taking proper decision and solving the problem, when he is aware of others emotions, feelings and needs, and when he develops and maintains mutually satisfying relationships, he is said to be emotionally and social intelligent. To do this, we need to be sufficiently optimistic and we need to manage emotions so that they work for us and not against us [7].

This study was done to find the impact of yoga on emotional dimensions of the participants. Emotional dimensions include sensitivity, maturity and competency.

## MATERIALS AND METHODS

The study includes 30 subjects between 20-60years of age who came to Prasanti Kutiram for yoga practice and 30 age matched controls. Both males and females included in the study. Females who were menstruating or pregnant or having menopausal problems were excluded from the study. People on psychiatric drugs and any form of drug dependence were also excluded

In this study the EQ test developed by Prof N. K. Chadha which was standardized and validated with reliability of 0.94 and validity of 0.92 was used to measure emotional dimensions of emotional competency, emotional maturity and emotional sensitivity. This test has 22 real life situations based on 20 point scale rating and then finally obtained scores that was converted into percentile score.

Base line data of all the study subjects were collected by administering the questionnaire on the first day in Prasanti Kutiram. Test subjects of this study participated in asanas, pranayama, cyclic meditation, notional correction, devotional sessions, supervised practice sessions (by trained experts) for one hour daily. The program was conducted in the serene and peaceful atmosphere of the Prasanti Kutiram in a residential set up with a schedule starting from 5 AM to 10 PM. Saatvic diet (high-fiber low-fat vegetarian and balanced diet) was given. After one week of integrated yoga therapy, same questionnaire was given to subjects and this was

considered as post test. Control group were assessed twice with in an interval of 7 days without any intervention

**Statistical analysis**

EQ-test uses scoring such as 0, 5, 10, 15 and 20. The total score was calculated using scoring key and then with the help of interpretation of EQ score as shown in Table and then the percentile value and interpretation was assessed (Table-1).

All statistical analysis was carried out using the version 16.0 of the Statistical Package for Social Sciences (SPSS) software.

Paired t test was done to compare the means before and after the integrated yoga therapy for total EQ, sensitivity, maturity and competency.

Independent t test was done to compare between subjects and age matched controls.

**RESULTS**

The test group included 30 subjects among them 15 were males and 15 were females with an average age of 40.02±13.09. 30 control subjects including 17 males and 13 females with average age of 40.16±13.48.

Pretest results of EQ test in 30 test subjects was found to be P-50 (moderate EQ) and after one week of intervention total EQ was found to be P-90 (Extremely high EQ). Sensitivity, maturity and competency before intervention were P-75(high EQ), P-40 (low EQ) and P-50 (moderate EQ) respectively and after the intervention, P-50 (moderate EQ), P-90 (Extremely high EQ) and P-90 (Extremely high EQ) respectively. The paired t test results in the test group were statistically significant with p <0.001. (Table-2, Graph-1).

Pretest results of EQ test in 30 controls was found to be P-50 (moderate EQ) and after one week of intervention total EQ was still found to be P-50 (moderate EQ). Sensitivity, maturity and competency before intervention were P-50 (moderate EQ), P-50 (moderate EQ) and P-75 (high EQ) respectively and after the intervention, P-50 (moderate EQ), P-50 (moderate EQ) and P-75 (high EQ) respectively. There pair t test results in the control group were not statistically significant. (Table-3, Graph-2)

Results of independent t test between test group and control group is described in Table-4

**Table 1: interpretation of EQ test results**

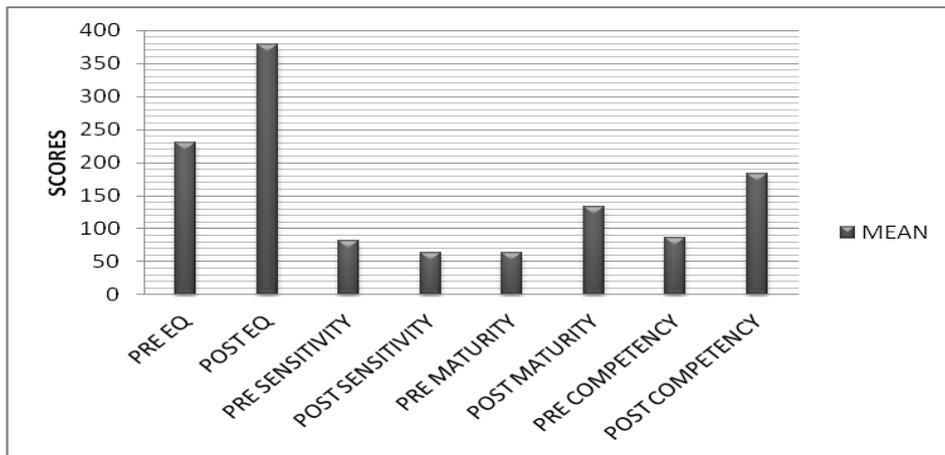
EQ DIMENSIONS	P-90 (EXTREMELY HIGH EQ)	P-75 (HIGH EQ)	P-50 (MODERATE EQ)	P-40 (LOW EQ)	P-20 (TRY THE TEST SOME OTHER DAY)
SENSITIVITY (RANGE OF SCORES: 25-100)	91-100	81-90	56-80	31-55	<30
MATURITY (RANGE OF SCORES:35-140)	121-140	101-120	81-100	46-80	<45
COMPETENCY (RANGE OF SCORES:50-200)	126-200	96-125	76-95	51-75	<50
TOTAL EQ (RANGE OF SCORES:110-440)	311-440	271-310	201-270	126-200	<125

**Table 2: Results of paired t test in test subjects**

SUBJECTS	MEAN± SD	Correlation
EQ-PRE	231±23.54	0.360*
EQ-POST	379.50±24.58	
SENSITIVITY-PRE	81.3333±7.30	0.455*
SENSITIVITY-POST	63.3333±10.53	
MATURITY-PRE	64.1667±14.50	0.233*
MATURITY-POST	132.83±8.37	
COMPETENCY-PRE	86.1667±14.72	0.371*
COMPETENCY-POST	183.50±14.68	

\*p value <0.001- statistically significant.

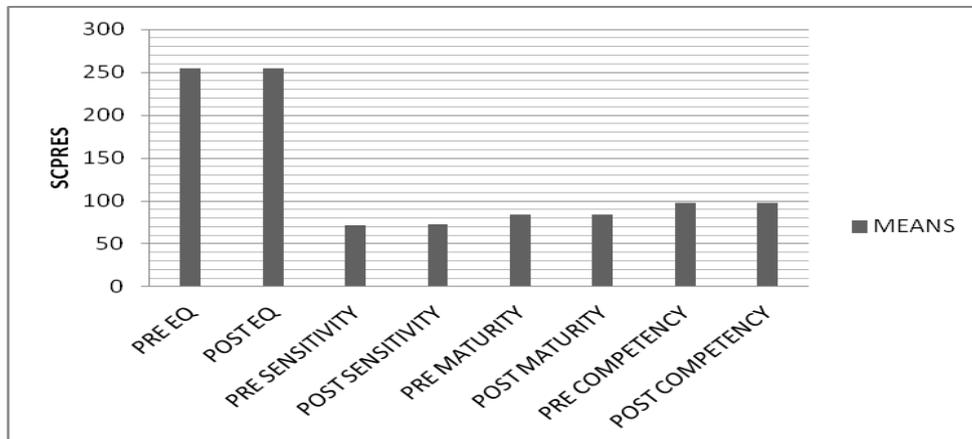
**Graph 1: Graphical representation of mean values of EQ among the participants.**



**Table 3: Results of paired t test in controls**

CONTROLS(n=30)	MEAN± SD	p value
EQ-PRE	254.33±29.14	0.25
EQ-POST	255±29.65	
SENSITIVITY-PRE	71.16±11.86	0.04
SENSITIVITY-POST	72.66±13.87	
MATURITY-PRE	84.16±11.89	0.26
MATURITY-POST	83.66±11.66	
COMPETENCY-PRE	98.16±16.21	0.42
COMPETENCY-POST	97.83±15.51	

**Graph 2: Graphical representation of mean values of EQ among the controls.**



**Table 4: Results of Independent t test for subjects and controls.**

Test subjects v/s Control	t value	p value
EQ-PRE	-3.41	0.001
SENSITIVITY-PRE	3.99	<0.001
MATURITY-PRE	-5.83	<0.001
COMPETENCY-PRE	-3.00	0.004
EQ-POST	17.70	<0.001
SENSITIVITY-POST	-2.93	0.005
MATURITY-POST	18.75	<0.001
COMPETENCY-POST	21.95	<0.001

### DISCUSSION

Integrated Yoga is helpful to enhance the Emotional Quotient of the people practicing it. The ability to understand the depth of feeling, the ability to know adequate expression and how to control our emotions; that is when there is a negative feeling, how he/she will have self-control, the ability to function in a balanced manner when emotionally disturbed, the ability to understand the root cause of a particular problem and to take corrective measures, the ability to develop optimistic attitude by developing positive emotions can be developed by practicing the integrated Yoga.

Previous studies on Yoga shows that, integrated Yoga enhances the Emotional quotient of its participants. The present study also shows similar results except for EQ component- sensitivity (there was no improvement in sensitivity after integrated Yoga)

EQ analysis (n=30) showed significant increase ( $P < 0.001$ ) in post intervention as compared with pre intervention. Significant increase in EQ in the present study suggests that Integrated Yoga participants may strike a balance between emotion and reason, are aware of their own feelings, show empathy and compassion for others, and have high self-esteem [8]. The present study is consistent with these findings and indicates that a systematic adoption of integrated yoga can result in better EQ.

People with high EQ are happier and more successful in life, they are more creative, enthusiastic in work, and less stressed and can resolve emotional issues easily [8].

### CONCLUSION

Adoption of integrated Yoga can improve the emotional, mental, social well being of the people practicing it, thus helping the people perform better, to combat their day to day stress.

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