



## Effects of six months of tratak training on selected psychological variables among male and female students of high school

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### Abstract

The subjects for this study were 100 (50 male and 50 female) High School Students of Bijnor Distt. All the subjects were divided into four groups i.e two experimental and two control groups in respective sex category the age of the subjects will range from 15 to 18 years. Psychological Variables: Stress and Self-Confidence. The particular design used would single group design Tratak training sessions was held thrice a week, for duration of 2 hours. Training was imparted for a period of 8 weeks to see significant changes in the psychological variables of the subjects. The data on psychological variables were collected by administering following standard tests: Strees will be measured by Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee and Self Confidence will be measured by Rekha Agnihotri questionnaire. To determine the effect of tratak on selected psychological variables paired T-Test will be employed at .05 level of significance. Pearson's product moment correlation coefficient was used to establish relationship among the pre and post test scores of the respective groups.

**Keywords:** tratak, psychological variables, stress and self-confidence

### Introduction

Today many people in the claim to practice yoga for its health benefits. Without consciously adopting Hindu religious perspectives which underlies the practice and usually become apparent in more advanced stages of instruction. Elementary courses of trataka on physical exercises consisting of various postures and breathing techniques. A growing body of research evidence supports the belief that certain yoga techniques may improve physical and mental health through down-regulation of the hypothalamus pituitary adrenal (HPA) axis and the sympathetic nervous system.

Yoga is an ancient discipline designed to bring balance and health to the physical, mental, emotional, and spiritual dimensions of the individual. It is long popular practice in India that has become increasingly more common in Western society. "Yoga" means union of our individual consciousness with the Universal Divine Consciousness in a super-conscious state known as Samadhi.

Tratak meditation method is one very powerful ancient practice that can help a person to make some very significant spiritual progress. People also call it fixed gazing meditation because this technique is all about fixing your eye and focus on external objects so that you could use it as an instrument to become more aware of your mind activities. This meditation requires you to be persistent with your efforts for a very long time before you expect to see any significant change in yourself.

Various Forms of Tratak Meditation

As I have mentioned, this method makes you gaze at an external object so, you have many options available to choose from and four such well-known types of Tratak are: –

1. Tratak on a flame Here the practitioner puts his focus on the flame of a candle or oil lamp. (known as Diya Tratak in Hindi)
2. Tratak on a point on wall or board – A practitioner here gains a greater ability to focus by gazing on a dark spot drawn on the wall or board. (known as Bindu Tratak in Hindi)
3. Mirror Tratak Here the practitioner observes his mirror reflection. (also known as Darpan Tratak in Hindi)
4. Tratak on an image - This done by concentrating on any particular image, it could be some picture related to your faith or religion

Inactive people are more likely to add more weight, become obese and develop impaired cardiac function. They have poorer tolerance of physical and mental stress and they are less able to cope with illness and injury. Moreover, inactivity accelerates the process of ageing. The changing trend in lifestyle, industrialization, automation, mechanization and above all the concentration on speed, all these take men to obesity. Growing old is inevitable, but growing old youthfully becomes possible only when we keep our body supple, strong and fit.

**The objectives of the study will be as follows**

1. To determine the effect of Tratak Training on selected psychological variables in relation to male high school students of Bijnor District.
2. To determine the effect of Tratak Training on selected psychological variables in relation to female high school students of Bijnor District

**On the basis of study reviewed and own understanding of the scholar about the problem, it is hypothesized that**

1. It may be hypothesized that Tratak will have different degree of effect on selected psychological variables in relation to high school male and female students of Bijnor District.
2. It may be hypothesized that Tratak will have different degree of relationship on selected psychological variables in relation to high school male and female students of Bijnor District.

**Methodology**

The subjects for this study were 100 (50 male and 50 female) High School Students of Bijnor Distt. All the subjects were divided into four groups i.e two experimental and two control groups in respective sex category the age of the subjects will range from 15 to 18 years.

The particular design used would single group design Tratak training sessions was held thrice a week, for duration of 2 hours. Training was imparted for a period of 8 weeks to see significant changes in the psychological variables of the subjects. The data on psychological variables were collected by administering following standard tests: Strees will be measured by Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee and Self Confidence will be measured by Rekha Agnihotri questionnaire, To determine the effect of tratak on selected psychological variables paired T-Test will be employed at .05 level of significance. Pearson's product moment correlation coefficient was used to establish relationship among the pre and post test scores of the respective groups.

**Analysis**

The results pertaining to find the relationship and to find out the significant difference if any, between pre and post data for stress were found out with the help of 'T- Ratio. The analysis of data pertaining to pre and post data for stress is presented in Table 1.

**Table 1:** Mean and standard deviation (pre and post test) of stress of bijnor district male subjects in psychological stress scale constructed developed questionnaire by dr.a.k shrivastava and d.m pestonjee

Nature of Test	N	Mean	Standard Deviation
Pre Test	50	270.80	37.68
Post Test	50	278.85	40.65

The means and standard deviations for pre and post test pre and post data for stress it was found that the score of the subjects was normal as per the national standards in pre test, difference is very significant as the score is in points and higher the score better the score, hence it could be said that the Tratak practice has reduce the stress the stress level of the subjects. The standard deviation in pre and post test was more or less same which suggests that the scores did not variate much among the subjects in pre as well as post test being from the same age group and sex.

To find out the significant difference if any, between pre and post test of stress of Bijnor District in Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee were found out with the help of "Paired T-Test". The analysis of data pertaining to is presented in Table 2.

**Table 2:** Paired t-test for pre and post test with respect to stress of bijnor district male subjects in psychological stress scale (pss) constructed developed questionnaire by dr.a.k shrivastava and d.m pestonjee

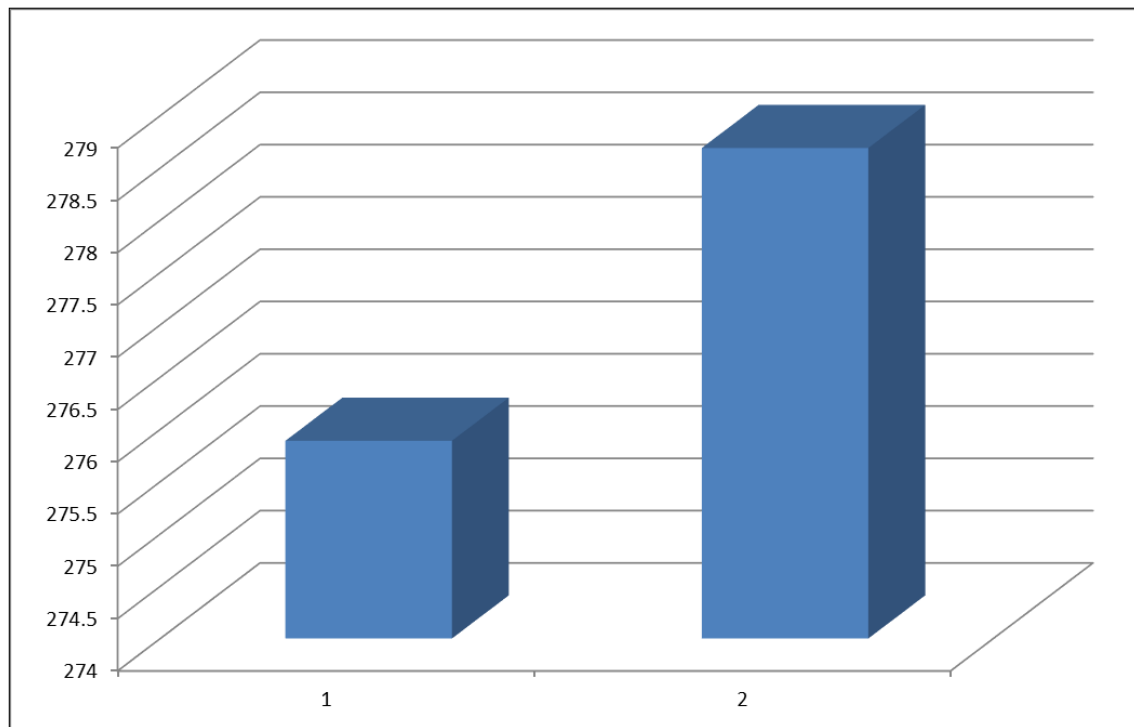
Variable	Groups	df	T- Ratio
Score in PSS Questionnaire	2	49	15.67*

\*Significant at.05 level of confidence.

$$T_{.05} (2,49) = 0.996$$

It is evident from Table - 2 that variability exists among the pre and post test of stress of Bijnor District in Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee. The difference is very significant as the score is in points and higher the timing betters the score, hence it could be said that the Tratak practice has reduce the stress of the subjects.

Difference between the means of the pre and post test of stress of Bijnor District in Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee., is shown in Fig. - 1.



**Fig 1:** Bar diagram representing means of stress of bijnor district in psychological stress scale (pss) constructed developed questionnaire by dr.a.k shrivastava and d.m pestonjee

#### Pre Test Post Test

The results pertaining to find the relationship and to find out the significant difference if any, between pre and post data for stress were found out with the help of 'T- Ratio. The analysis of data pertaining to pre and post data for stress is presented in Table 3.

**Table 3:** Mean and standard deviation (pre and post test) of stress of bijnor district female subjects in psychological stress scale (pss) constructed developed questionnaire by dr.a.k shrivastava and d.m pestonjee

Nature of Test	N	Mean	Standard Deviation
Pre Test	50	265.89	35.68
Post Test	50	268.95	36.65

The means and standard deviations for pre and post test pre and post data for stress it was found that the score of the subjects was normal as per the national standards in pre test, difference is very significant as the score is in points and higher the score better the score, hence it could be said that the Tratak practice has reduce the stress level of the subjects. The standard deviation in pre and post test was more or less same which suggests that the scores did not variate much among the subjects in pre as well as post test being from the same age group and sex. To find out the significant difference if any, between pre and post test of stress of Bijnor District in Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee. were found out with the help of "Paired T-Test". The analysis of data pertaining to is presented in Table 4.

**Table 4:** Paired t-test for pre and post test with respect to stress of bijnor district female subjects in psychological stress scale (pss) constructed developed questionnaire by dr.a.k shrivastava and d.m pestonjee

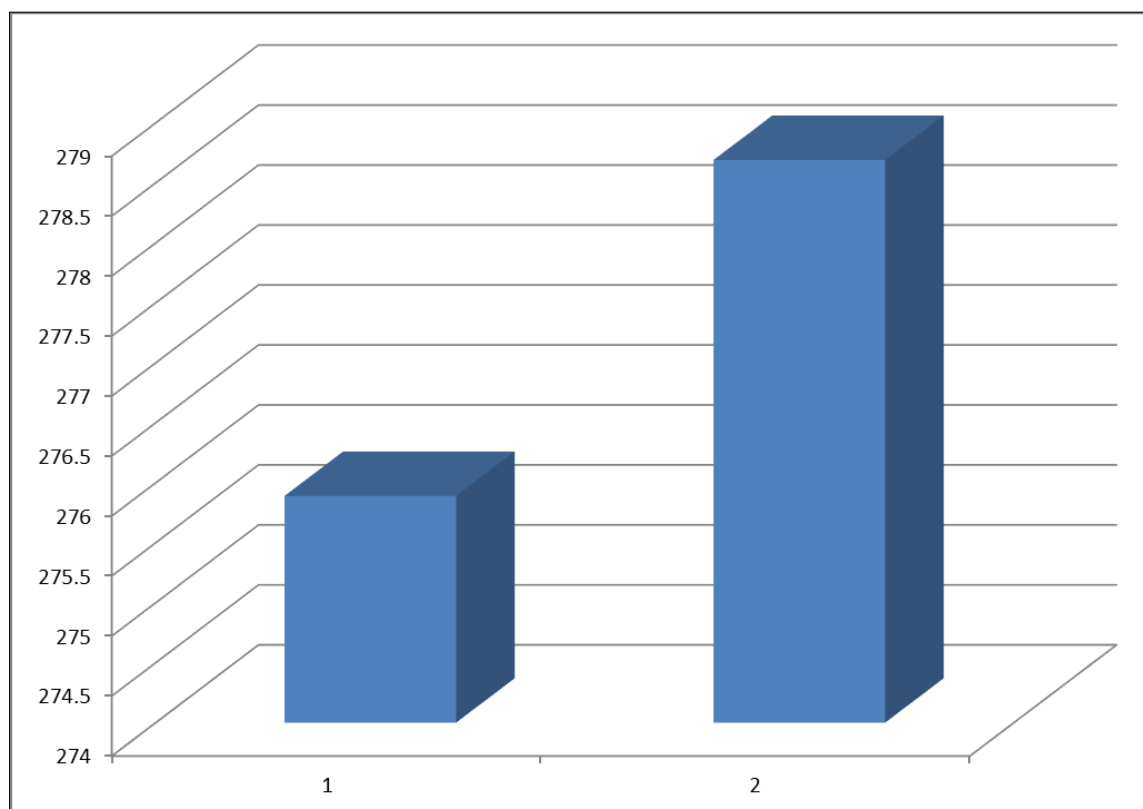
Variable	Groups	df	T- Ratio
Score in PSS Questionnaire	2	49	14.67*

\*Significant at.05 level of confidence.

T.05 (2.49) = 0.996

It is evident from Table - 4 that variability exists among the pre and post test of stress of Bijnor District in Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee.. The difference is very significant as the score is in points and higher the timing better the score, hence it could be said that the Tratak practice has reduce the stress of the subjects.

Difference between the means of the pre and post test of stress of Bijnor District in Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee., is shown in Fig. - 2.



**Fig 2:** Bar diagram representing means of stress of bijnor district in psychological stress scale (pss) constructed developed questionnaire by dr.a.k shrivastava and d.m pestonjee

### Pre Test

### Post Test

The results pertaining to find the relationship and to find out the significant difference if any, between pre and post data for self-confidence were found out with the help of 'T- Ratio. The analysis of data pertaining to pre and post data for self Confidence is presented in Table 5.

**Table 5:** Mean and standard deviation (pre and post test) of bijnor district male subjects in agnihotri's self-confidence inventory (asci) constructed by dr. rekha agnihotri

Nature of Test	N	Mean	Standard Deviation
Pre Test	50	65.89	35.65
Post Test	50	68.95	36.58

The means and standard deviations for pre and post test pre and post data for self-confidence it was found that the score of the subjects was normal as per the national standards in pretest, difference is very significant as the score is in points and higher the score better the score, hence it could be said that the Tratak practice has improved the self confidence level of the subjects. The standard deviation in pre and post test was more or less same which suggests that the scores did not variate much among the subjects in pre as well as post test being from the same age group and sex.

To find out the significant difference if any, between pre and post test of self confidence Agnihotri's Self-Confidence Inventory (ASCI) constructed by Dr. Rekha Agnihotri. of Bijnor District were found out with the help of "Paired T-Test". The analysis of data pertaining to is presented in Table 6.

**Table 6:** Paired t-test for pre and post test of bijnor district male subjects in agnihotri's self confidence inventory (asci) constructed by dr. Rekha agnihotri

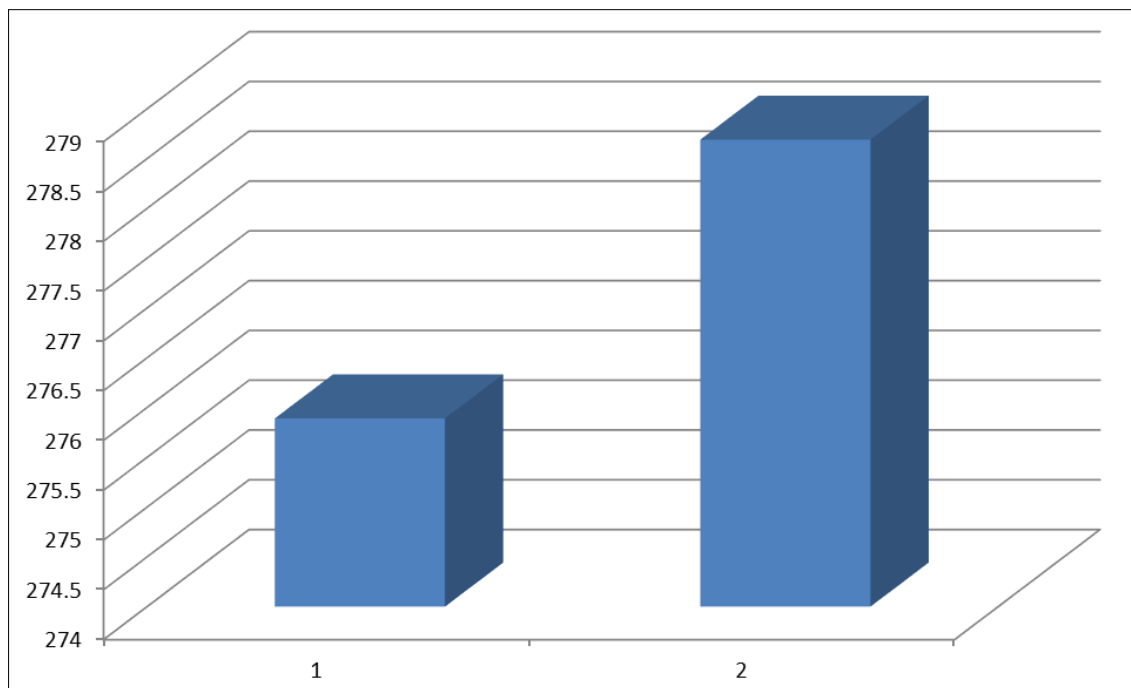
Variable	Groups	df	T- Ratio
Score ASCI Questionnaire	2	49	18.67*

\*Significant at.05 level of confidence.

T.05 (2.49) = 0.996

It is evident from Table – 6 that variability exists among the pre and post test of self-confidence Bijnor District in Self-Confidence Inventory (ASCI) constructed by Dr. Rekha Agnihotri. The difference is very significant as the score is in points and higher the timing better the score, hence it could be said that the Tratak practice has improved the Self-Confidence of the subjects.

Difference between the means of the pre and post test of stress of Bijnor District in Self-Confience Inventory (ASCI) constructed by Dr. Rekha Agnihotri, is shown in Fig. - 3.



**Fig 3:** Bar diagram representing means of bijnor district in agnihotri's self-confidence inventor (asci) constructed by dr. Rekha agnihotri

#### Pre Test Post Test

The results pertaining to find the relationship and to find out the significant difference if any, between pre and post data for self-confidence were found out with the help of 'T- Ratio. The analysis of data pertaining to pre and post data for Self-Confidence is presented in Table 7.

**Table 7:** Mean and standard deviation (pre and post test) of bijnor district female subjects in agnihotri's self-confidence inventory (asci) constructed by dr. Rekha agnihotri

Nature of Test	N	Mean	Standard Deviation
Pre Test	50	63.58	32.21
Post Test	50	67.85	33.25

The means and standard deviations for pre and post test pre and post data for self-confidence it was found that the score of the subjects was normal as per the national standards in pretest, difference is very significant as the score is in points and higher the score better the score, hence it could be said that the Tratak practice has improved the self confidence level of the subjects. The standard deviation in pre and post test was more or less same which suggests that the scores did not variate much among the subjects in pre as well as post test being from the same age group and sex.

To find out the significant difference if any, between pre and post test of self-confidence Agnihotri's Self-Confidence Inventory (ASCI) constructed by Dr. Rekha Agnihotri. of Bijnor District were found out with the help of "Paired T-Test". The analysis of data pertaining to is presented in Table 8.

**Table 8:** Paired t-test for pre and post test with respect bijnor district female subjects in agnihotri's self-confidence inventory (asci) constructed by dr. rekha agnihotri

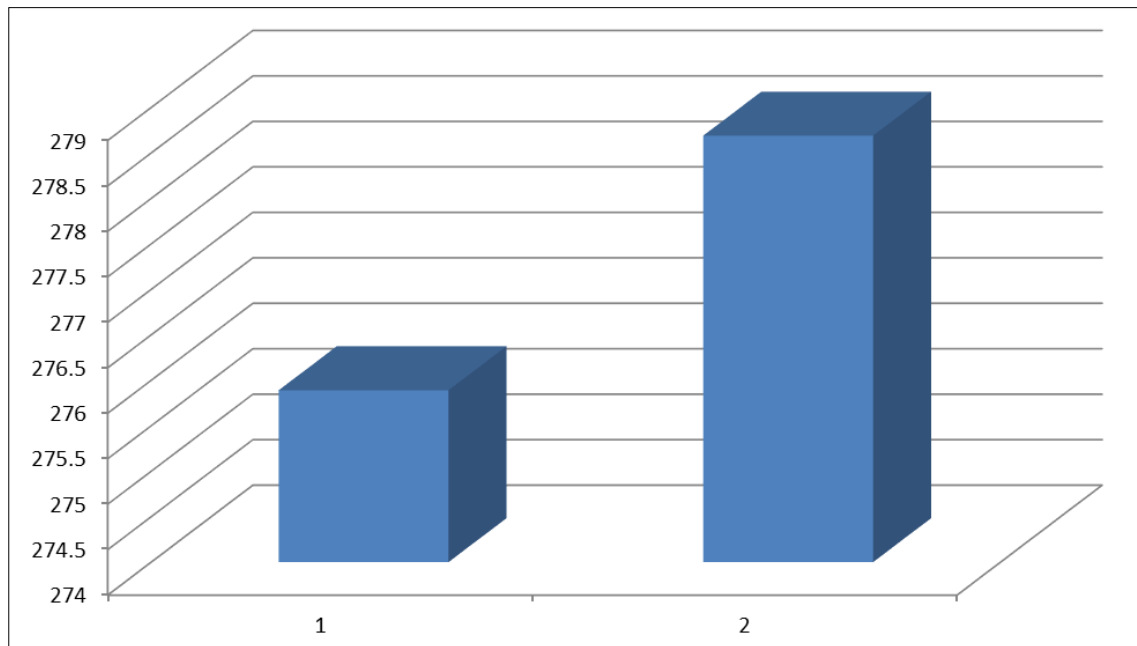
Variable	Groups	df	T- Ratio
Score ASCI Questionnaire	2	49	17.67*

\*Significant at.05 level of confidence.

T.05 (2.49) = 0.996

It is evident from Table – 8 that variability exists among the pre and post test of self-confidence Bijnor District in Self-Confidence Inventory (ASCI) constructed by Dr. Rekha Agnihotri. The difference is very significant as the score is in points and higher the timing better the score, hence it could be said that the Tratak practice has improved the Self-Confidence of the subjects.

Difference between the means of the pre and post test of stress of Bijnor District in Self-Confience Inventory (ASCI) constructed by Dr. Rekha Agnihotri, is shown in Fig. - 4.



**Fig 4:** Bar diagram representing means of bijnor district in agnihotri's self-confidence inventory (asci) constructed by dr. rekha agnihotri

### Pre Test Post Test

#### Discussion of Findings

1. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of stress of male subjects Bijnor District in Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee. The groups showed significant difference as lower the timing better the performance. This depicts that Tratak practices reduce the stress of the subjects and yogic asanas.
2. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of stress of female subjects Bijnor District in Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee. The groups showed significant difference as lower the timing better the performance. This depicts that Tratak practices reduce the stress of the subjects and yogic asanas.
3. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of self-confidence of male subjects Bijnor District in Self-Confidence Inventory (ASCI) constructed by Dr. Rekha Agnihotri. The groups showed significant difference as lower the timing better the performance. This depicts that Tratak practices improve the concentration of the subjects and yogic asanas.
4. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of self-confidence of female subjects Bijnor District in Self-Confidence Inventory (ASCI) constructed by Dr. Rekha Agnihotri. The groups showed significant difference as lower the timing better the performance. This depicts that Tratak practices improve the concentration of the subjects and yogic asanas

#### Conclusions

1. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of stress of male subjects Bijnor District in Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee. The groups showed significant difference as lower the timing better the performance. This depicts that Tratak practices reduce the stress of the subjects and yogic asanas.
2. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of stress of female subjects Bijnor District in Psychological Stress Scale Constructed developed by Dr. A. K. Sirvastava and Dr. D. M. Pestonjee. The groups showed significant difference as lower the timing better the performance. This depicts that Tratak practices reduce the stress of the subjects and yogic asanas.
3. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of self-confidence of male subjects Bijnor District in Self-Confidence Inventory (ASCI) constructed by Dr. Rekha Agnihotri. The groups showed significant difference as lower the timing better the performance. This depicts that Tratak practices improve the Self-Confidence of the subjects and yogic asanas.
4. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and posttest of self-confidence of female subjects Bijnor District in Self-Confidence Inventory (ASCI)

constructed by Dr. Rekha Agnihotri. The groups showed significant difference as lower the timing better the performance. This depicts that Tratak practices improve the Self-Confidence of the subjects and yogic asanas

### Discussion of Hypothesis

1. It was hypothesized that Tratak will not have different degree of effect on selected psychological variables in relation to high school male and female students of Bijnor District may be rejected.
2. It was hypothesized that Tratak will not have different degree of relationship on selected psychological variables in relation to high school male and female students of Bijnor District may be rejected.

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