# Pilot study Effectiveness of hypnotherapy on Exam anxiety and exam performance among students

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**Abstract** The aim of this study was to determine the effect of Hypnotherapy on exam anxiety and exam performance among school students. Methods: Evaluative research with true experimental pretest and post test control group design was adopted for the study. The sample consisted of school students between 14 to 17 years. Simple random sampling with lottery method was used to select samples. 10 each were allotted into experimental and control group. Experimental group were given hypnotherapy in 3sessions before the exams. The control group was not given any intervention.

Result: The results of the study revealed that after the implementation of hypnotherapy that the level of anxiety in the students of Experimental group was reduced 36.31% where as in control group of students anxiety are reduced by 2.89%..60.00% of them are having moderate   level of exam performance score and 40.00% of them having good exam performance score.  The exam performance of students in the Experimental group of students gained  score  of18.11%  where  as  control  group  of  students  gained  score  of 1.76%. It  shows experimental group of students gained more scores in exam than control group of students.

**Keywords: Hypnotherapy, Exam anxiety, Exam performance.**

**Introduction:**

Mental health is important at every stage of life, from childhood and adolescence through adulthood. Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps to determine how we handle stress, relate to others, and make choices.

Mental health issues like exam anxiety and stress often occur among students and create a negative impact on students. The phenomenon of mental health problems and mental illness are seen to be increasing. The findings by the National Morbidity Survey 2011 also showed that, 1.7 % of the respondents had suicidal thoughts, 0.9 % had planned to commit suicide, and 0.5 % had attempted suicide.

Anxiety is a common phenomenon that constitutes a universal cause of poor academic performance among students worldwide. It is a common undisputable fact in human life's that influence an individual's accomplishment in numerous situations, an average level of anxiety is useful in sustaining people hardworking and being responsible of what they have to do (Kahan, 2008 & Donnelly, 2009).

Hypnotherapy is a common method used for helping control exam nerves as it can help boost confidence and reduce feelings of anxiety. It can help you develop the ability to access the calm state of mind needed to sit an exam, or cope with a potentially overwhelming situation. Hypnotherapy techniques can encourage an individual to clear their racing mind and approach the exam with a cool, focused head. Your mind knows the information you need to pass the exam, but when experiencing exam stress or anxiety, your ability to focus and concentrate will suffer. Hypnotherapy will help you recall the information easily and correctly, as well as help restore your self-belief

India has one of the world's highest suicide rates for youth aged 13 to 29, according to a 2012 Lancet report, which illustrated the need for urgent interventions for this demographic. Every hour, one student commits suicide in India. .Psychologist pointed out that in a single class, there are currently 20% of students suffering from anxiety and depression due to parental, academic and peer pressure. Earlier it was only children above the age of 14 who formed a majority of the recorded student suicides, but now students of the age of 12 or 13 up with symptoms of depression and anxiety. The general claim is, then, that a person's attitude determines to a large extent his performance, and this attitude can be changed through the suggestions he will accept, either from himself or from other people. This is where hypnosis is so valuable for it has often been

defined as a procedure which induces a state of consciousness characterized by heightened responsiveness to direct suggestion.

Hypnosis helps individuals with anxiety because it eases them into a relaxed and calm state. In a 2016 study, scientists scanned the brains of 57 people undergoing hypnosis. They found changes in the areas of the brain that allowed for greater emotional control and reduced feelings of self-consciousness

## STATEMENT OF PROBLEM

"A study to evaluate the effectiveness hypnotherapy on Exam anxiety and exam performance among students in selected schools of Bhopal."

## OBJECTIVES

1. To assess the Pre- test and post -test level of Exam Anxiety, and Exam performance among students in Control & Experimental group.

2. To evaluate the effectiveness of hypnotherapy in terms of Exam Anxiety and Exam performance among students in experimental group.

3. To find out the association between pretest level of Exam anxiety, Exam performance with selected demographic variables among students in experimental group.

4. To find out the association between pretest level of exam anxiety, exam performance with selected demographic variables among students in control group.

5. To find out the relationship between pretest level of exam anxiety and exam performance among students in experimental and control group

## HYPOTHESIS:

H1: There is a significant difference between in pre-test and post- test scores on level of exam anxiety, Exam performance among students in Experimental group.

H2: There is a significant difference in post-test of exam anxiety, exam performance score among students between the experimental and control group.

H3: There is a significant association between pretest level of exam anxiety exam performance and selected demographic variables among students in experimental group.

H4: There is a significant association between pretest level of exam anxiety and selected demographic variables among students in control group

H5: There is a significant relationship between Exam Anxiety and Exam performance among students in the experimental and control group.

## RESEARCH METHODOLOGY

The study utilized the Evaluative research approach. True experimental pre- test post- test control group design research design was adopted for the study. Study was carried after obtaining permission from the School authorities of the selected school. Study population consisted of school students aged between 14 to 16 years. After obtaining written consent from the parents pretest was carried out and exam anxiety scale was tested for the students. Those students who scored more than 44 (boys) and girls more than 45were selected as samples. Based on the inclusion and exclusion criteria, 10 were allotted to experimental group and 10 were in control group study samples were identified using random sampling with lottery method. And their exam performance was recorded. Selected samples of experimental group were given hypnotherapy. The intervention was given in3 sessions, which was followed by post test exam anxiety test. Prior to their exams and after the exams the performance scores were recorded to see whether their performance has improved. Control group was not given any intervention.

## ETHICAL CONSIDERATION

The legal & ethical permissions and administrative approval was obtained from the concerned school authorities of the selected schools. Anonymity, confidentiality, and informed consent from the sample were also considered.

## ANALYSIS AND INTERPRETATION OF FINDINGS

### Description of Subjects According to Socio Demographic Variables

**Table 1: Frequency and Percentage Distribution of Demographic Profile of the Samples in Experiment and Control Group.** **(N=20)**

| | | Group | | | |
|---|---|---|---|---|---|
| | | Experimental (n=10) | | Control (n=10) | |
| | | n | % | n | % |
| Age | 14 -15 yrs | 7 | 70.00% | 7 | 70.00% |
| | 16 -17 yrs | 3 | 30.00% | 3 | 30.00% |
| Gender | Male | 3 | 30.00% | 6 | 60.00% |
| | Female | 7 | 70.00% | 4 | 40.00% |
| Type of family | Nuclear family | 7 | 70.00% | 9 | 90.00% |
| | Joint family | 3 | 30.00% | 1 | 10.00% |
| Occupation of father | Business | 2 | 20.00% | 1 | 10.00% |
| | Private job | 6 | 60.00% | 5 | 50.00% |
| | Govt job | 2 | 20.00% | 4 | 40.00% |
| Occupation of mother | Business | 1 | 10.00% | 0 | 0.00% |
| | Private job | 3 | 30.00% | 4 | 40.00% |
| | Govt job | 3 | 30.00% | 1 | 10.00% |
| | House maker | 3 | 30.00% | 5 | 50.00% |
| Any history of exam anxiety | Yes | 6 | 60.00% | 9 | 90.00% |
| | No | 4 | 40.00% | 1 | 10.00% |
| Previous therapy for anxiety | Yes | 0 | 0.00% | 0 | 0.00% |
| | No | 10 | 100.00% | 10 | 100.00% |

The above table shows the demographic information of school students in selected schools of Bhopal those who participated for the study.

- The findings of the study revealed that majority 70% of the students were of age 14-15years and 30% of 16-17years in both the groups.

- The data obtain through the study reveals that majority (70%) of the sample in Experimental group is female and majority of the sample in Control group (60%) were male.

- Majority of the samples in both groups were from Nuclear family.

- The findings revealed that most of the samples father's occupation in Experimental group was Private job (60%) and 20% students father were from Government job or Business, whereas in Control group 50% of students father had private job and 40% students father work in Government sector and 10% students father run business.

- The data revealed that most of the sample, mother's occupation in Control group were House Maker (60%) and 30% students father were from Government job or Private job and 10% mothers were running business, whereas in Experimental group 30% of students mother had private job and Government sector and 10% students mother run business.

- The data reveals that there was history of exam anxiety in 60% student in Experimental group and 90% students in Control Group.

- None of the sample had any previous therapy for anxiety in the experimental and control group.

**Table 2: COMPARISON OF PRETEST LEVEL OF ANXIETY SCORE**

**N=20**

| Level of anxiety | Experimental | | Control | | Chi square test |
|---|---|---|---|---|---|
| | n | % | n | % | |
| Extremely High | 0 | 0.00% | 0 | 0.00% | c2=0.26P=0.61(NS) |
| High | 7 | 70.00% | 8 | 80.00% | |
| Above Average | 3 | 30.00% | 2 | 20.00% | |
| Average | 0 | 0.00% | 0 | 0.00% | |
| Below average | 0 | 0.00% | 0 | 0.00% | |
| Low | 0 | 0.00% | 0 | 0.00% | |
| Extremely Low | 0 | 0.00% | 0 | 0.00% | |
| Total | 10 | 100.00% | 10 | 100.00% | |

P>0.05 not significant

The above table explains that before intervention, in experimental group 70.00% of school students are having high level of anxiety score and 30.00% of them having above average level anxiety score. However, in control group, 80.00% of them are having high level of anxiety score and 20.00% of them having above average anxiety score.Statistically there is no significant difference at 0.05% between experimental group and control group.

**Table 3: COMPARISON OF POSTTEST LEVEL OF ANXIETY SCORE**

**N=20**

| Level of anxiety | Experimental | | Control | | Chi square test |
|---|---|---|---|---|---|
| | n | % | n | % | |
| Extremely High | 0 | 0.00% | 0 | 0.00% | c2=20.00P=0.001***(S) |
| High | 0 | 0.00% | 6 | 60.00% | |
| Above Average | 0 | 0.00% | 4 | 40.00% | |
| Average | 0 | 0.00% | 0 | 0.00% | |
| Below average | 3 | 30.00% | 0 | 0.00% | |

| | | | | | |
|---|---|---|---|---|---|
| Low | 7 | 70.00% | 0 | 0.00% | |
| Extremely Low | 0 | 0.00% | 0 | 0.00% | |
| Total | 10 | 100.00% | 10 | 100.00% | |

P<0.001 very high significant

The above table shows the level of anxiety score after the intervention, in experimental group students, 30.00% of them are having below average of anxiety score and 70.00% of them having extremely low anxiety score. In control group, 60.00% of them are having high level of anxiety score and 40.00% of them having above average anxiety score. Statistically there is a significant difference between experimental group and control group at P0.001level.

**Table 4: COMPARISON OF PRETEST LEVEL OF EXAM PERFORMANCE SCORE**

| Level of exam performance | Experimental | | Control | | Chi square test |
|---|---|---|---|---|---|
| | n | % | n | % | |
| Poor | 7 | 70.00% | 6 | 60.00% | c2=0.22P=0.64(NS) |
| Moderate | 3 | 30.00% | 4 | 40.00% | |
| Good | 0 | 0.00% | 0 | 0.00% | |
| Total | 10 | 100.00% | 10 | 100.00% | |

The above table shows the level of exam performance score, in experimental group students, 70.00% of them are having poor level of exam performance score and 30.00% of them having moderate exam performance score.In control group, 60.00% of them are having poor level of exam performance score and 40.00% of them having moderate exam performance score. Statistically there is no significant difference between experimental group and control group at P0.001level.

**Table 5 COMPARISON OF POSTTEST LEVEL OF EXAM PERFORMANCE SCORE**

| Level of exam performance | Experimental | | Control | | Chi square test |
|---|---|---|---|---|---|
| | n | % | n | % | |
| Poor | 0 | 0.00% | 4 | 40.00% | c2=7.08P=0.05*(S) |
| Moderate | 6 | 60.00% | 6 | 60.00% | |

| Good | 4 | 40.00% | 0 | 0.00% | |
|------|---|--------|---|-------|--|
| Total | 10 | 100.00% | 10 | 100.00% | |

P≤0.001 very high significant

The above table shows the level of anxiety score after the intervention, in experimental group of students, 60.00% of them are having moderate level of exam performance score and 40.00% of them having good exam performance score. In control group, 40.00% of them are having moderate level of exam performance score and 60.00% of them having good exam performance score. Statistically there is a significant difference between experimental group and control group at P0.001level.

**Table 6 EFFECTIVENESS OF HYPNOTHERAPY ON EXAM ANXIETY AMONG STUDENTS**

**N=20**

| Group | Test | Maximum score | Mean anxiety score | % of mean score | Percentage of anxiety reduction score |
|-------|------|---------------|--------------------|-----------------|----------------------------------------|
| Experimental | Pretest | 76 | 62.30 | 81.97% | 36.31% |
| | Posttest | 76 | 34.70 | 45.66% | |
| Control | Pretest | 76 | 63.40 | 83.42% | 2.89% |
| | Posttest | 76 | 61.20 | 80.53% | |

The Table shows that the level of anxiety in the students of Experimental group were reduced 36.31% where as in control group of students anxiety are reduced by 2.89%. It shows that the school students in experimental group's anxiety level were reduced more than control group school students.

**Table 7 EFFECTIVENESS OF HYPNOTHERAPY ON EXAM PERFORMANCE AMONG STUDENTS**

| Group | Test | Maximum score | Mean exam performance score | % of mean score | Percentage of exam performance gain score |
|---|---|---|---|---|---|
| Experimental | Pretest | 100 | 49.44 | 49.44% | 18.11% |
| | Posttest | 100 | 67.55 | 67.55% | |
| Control | Pretest | 100 | 51.06 | 51.06% | 1.76% |
| | Posttest | 100 | 52.82 | 52.82% | |

The data in the above table shows that the exam performance of students in the Experimental group of students are reduced 18.11% where as control group of students are reduced 1.76%. It shows experimental group of students are gained more exam performance than control group of students.

**Table 8 Correlation between mean Anxiety reduction score and exam performance gain score(experimental)**

| | Correlation between | Mean score Mean±SD | Karl pearson Correlation coefficients | Interpretation |
|---|---|---|---|---|
| Experimental group | Knowledge gain score Vs Skill gain score | 27.60±2.02 19.25±2.42 | r= 0.44 P=0.001*** | There is a significant positive moderate correlation between Anxiety reduction score and performance gain score. It means anxiety decreases their performance score also increases moderately |

**Table 9 Correlation between mean Anxiety reduction score and exam performance gain score(control)**

| | Correlation between | Mean score Mean±SD | Karl Pearson Correlation coefficients | Interpretation |
|---|---|---|---|---|
| Control group | Anxiety reduction score Vs Performance gain score | 2.20±0.94 1.76±0.99 | r= 0.14 P=0.34 | There is not significant positive poor correlation between Anxiety reduction score and performance gain score. It means anxiety decreases their performance score also increases poorly |

➢ Chi square test was computed to find Association between pretest level of anxiety score and demographic variables among experimental group and control group. None of the variables were significant.

## CONCLUSION AND RECOMMENDATIONS

It is normal to have exam anxiety that help the students to be prepared them for facing examination, on the other hand it can also distress the students that can have a negative impact on students' physically, emotionally, cognitively that paves a way to poor performance in the examination.

Exam anxiety appears to be a relatively widespread problem and finding ways to reduce its effects has become increasingly important. One possible intervention which has been suggested as a treatment for exam anxiety is hypnotherapy. Hypnotherapy has been used to treat a number of anxiety disorders including post-traumatic stress disorder. Hypnotherapy as a treatment intervention proved to be effective in reducing exam anxiety and improving academic performance amongst children. In the present study the researcher has used the hypnotherapy as an intervention to reduce the exam anxiety and improve the exam performance.

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