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*Original Article*

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# Impact of Hypnotherapy on Examination Anxiety and Scholastic Performance among School Children

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## ABSTRACT

**Aim:** The aim of the present research was to study the impact of hypnotherapy as treatment intervention in overcoming examination anxiety and improving scholastic achievement.

**Method:** A 10 item anxiety test developed by Nist and Diehl (1990) was administered on 10 school children of 13 and 14 years of age. Following pre and post test design, anxiety and scholastic achievement scores were obtained both before and after hypnotherapy intervention. The children were given 2 sessions each week in a month just before the exams and before each exam day. The hypnosis techniques used were relaxation exercises, anxiety management about taking and giving exams and positive suggestions given to the subconscious mind. **Results:** Pre test anxiety scores ranged from 80-92% among all the children while post test anxiety scores dropped to a range of 60-68%. The pre test academic scores ranged 50-57% while post intervention scores increased by 10-15%. Further, anxiety symptoms of forgetting before the exam, excessive nervousness, sweating during and before the exam, going blank after seeing the paper were all controlled/eliminated after hypnotherapy and these were observed by the teachers, parents and the children themselves.

**Conclusion:** These results indicated that hypnotherapy as treatment intervention proved to be effective in reducing exam anxiety and improving scholastic performance among children.

**Keywords:** Examination anxiety, scholastic performance

## Introduction

The process of hypnotherapy can be divided into pre-suggestion, suggestion, and post-suggestion phases. The pre-suggestion component may include selective attentional focusing with distraction, imagery, and relaxation methods. The aim is to reach an altered state of consciousness in which the conscious mind is relaxed, the unconscious mind is more accessible, and the subject is susceptible to suggestion. In the suggestion phase, specific goals or impressions are presented, questions may be asked of the subject, or memories may be explored. The post-suggestion phase occurs after a return to a normal state of consciousness, and new behaviors

based on hypnotic suggestions may be practiced.<sup>1</sup> It has been suggested that there is a risk of false memories (confabulation) as a result of some types of hypnotherapy, although scientific research is limited in this area.

## Test Anxiety

Test Anxiety is common among school children. It is normal to feel some level of anxiety or stress regarding upcoming exams. Most people can reduce anxiety levels through preparation.

## Symptoms of test anxiety

- **Physical** - headaches, nausea or diarrhea, extreme body temperature changes,

excessive sweating, shortness of breath, light-headedness or fainting, rapid heart-beat, and/or dry mouth.

- **Emotional** - excessive feelings of fear, disappointment, anger, depression, uncontrollable crying or laughing, feelings of helplessness
- **Behavioral** - fidgeting, pacing, substance abuse, avoidance
- **Cognitive** - racing thoughts, 'going blank', difficulty concentrating, negative self-talk, feelings of dread, comparing yourself to others, difficulty organizing your thoughts.

## Methodology

### Purpose

The aim of the present research was to examine the impact of hypnotherapy as treatment intervention in overcoming examination anxiety and improving scholastic achievement. The objectives of the study were: a) to assess the impact of hypnotherapy on test anxiety among school under pre and post intervention conditions, and b) to assess the impact of hypnotherapy on the school children's academic performance once hypnotherapy reduced the examination anxiety under pre and post intervention conditions.

### Design, Sample and Tool used

The present research is purposive and qualitative. Case study method was employed. A one group pre and post test design was used. Hypnotherapy was given as intervention to the children. Psychological assessment was done under pre and post test variable of test anxiety and academic performance. 10 school children were taken in for this study with the age range of 13-14 years.

**Inclusion criteria** included children with ages 12-14, i.e. classes 8th and 9th. The children were selected from a single school irrespective of their gender.

**Exclusion criteria** included all those children suffering from any other psychological or physical illnesses.

**Tool used** was the Test Anxiety Questionnaire (TAQ) developed by *Nist and Diehl* (1990).<sup>2</sup> It is a short questionnaire with 10 items for fast screening of anxiety level of children with test anxiety by taking out and seeing the anxiety symptoms through

the items. It is a test for taking out test anxiety results among school children. It has 10 items. The items were scored on the basis of a 5 point ranking scale 1-5, with 1 scoring 1 point and 5 scoring 5 points.

The statements included the analysis of physical symptoms experience by the children such as - visible signs of nervousness such as sweaty palms, shaky hands, and so on right before a test, having "butterflies" in the stomach before a test, feeling nauseated before a test, after having read through the test and feel that they do not know any of the answers, feel panic before and during a test, mind going blank during a test, able to remember the information and once they out of the testing situation, having trouble sleeping the night before a test, making mistakes on easy questions or put answers in the wrong places and having difficulty choosing answers.

The scores will range from 10 to 50. A low score (10-19 points) indicates that children do not suffer from test anxiety. In fact, if a child's score is extremely low (close to 10), a little more anxiety may be healthy to keep them focused and to get your blood flowing during exams. Scores between 20 and 35 indicate that, although the child exhibits some of the characteristics of test anxiety, the level of stress and tension is probably healthy. Scores over 35 suggest that the children are experiencing an unhealthy level of test anxiety. Thus, we should evaluate the reasons for the distress and identify strategies for compensating and using therapeutic interventions to cope with test stress and anxiety.

### Procedure

Children identified with test anxiety were taken from a school of Delhi. A one group pre and post test design was used. Hypnotherapy was given as intervention to the children for 1 month prior to the final exams. Psychological assessment was done under pre and post test variable of test anxiety and academic performance. 10 school children were taken in for this study with the age range of 13-14 years. Children's academic performance and the anxiety cognitive, behavioral, physical and emotional symptoms were looked into. Following pre and post test design, anxiety and scholastic achievement scores were obtained both before and after hypnotherapy intervention. The children were given 2 sessions each week for a month just before

the exams and 1 session before each exam day of the final exams. The hypnosis techniques used were relaxation exercises, anxiety management about taking and giving exams and positive suggestions given to the subconscious mind. Hypnotherapy was given to them to help them overcome their fear of exams/tests just after their half yearly. The TAQ was administered once in the half yearly exams (pre hypnotherapy intervention) and once during the final exams (post hypnotherapy intervention). Qualitative analysis using case study method was used. Behavioral analysis was made on the basis of the self reports made by each child of changes in anxiety level after hypnotherapy was given. Thus, results were obtained.

### Results and Interpretations

After pre test TAQ was administered, the test scores were obtained. Some common symptoms reported by all 10 children were as follows: Physical symptoms: quick heartbeat, sweating, nausea, stomach discomfort, light headache, fainting, dry mouth. Cognitive symptoms: going blank during exam, difficulty organizing thoughts, impaired concentration, negative self talk, feelings of dread, comparing self to others. Behavioral symptoms: fidgeting, pacing, avoidance behavior. Emotional symptoms: excessive feelings of fear, disappointment, anger, depression, uncontrollable crying or laughing, feelings of helplessness. Children were given 2 sessions of hypnotherapy each week 1 month prior to their final exams and 1 session a day prior to each exam.

Some of the common test — anxiety physical symptoms experienced by the children were headaches, nausea or diarrhea, extreme body temperature changes, excessive sweating, shortness of breath, light-headedness or fainting, rapid heartbeat, and/or dry mouth. The emotional symptoms included excessive feelings of fear, disappointment, anger, depression, uncontrollable crying or laughing, feelings of helplessness while the behavioral symptoms seen in children were fidgeting, pacing, substance abuse, avoidance and the cognitive symptoms included racing thoughts, 'going blank', difficulty concentrating, negative self-talk, feelings of dread, comparing yourself to others, difficulty organizing your thoughts. However, some of the important symptoms that

were visibly observed and reported by the parents and children have been highlighted in each of the children. The following are the 10 case studies of the children taken in the research are documented under.

#### Case study 1: 13-year-old girl

- Child complained of forgetting and going blank in the exam, fidgeting, inability to relax, problem in time management, fearful and sweaty palm while taking the test, feeling very low and fearful, had a headache, increased heart beat, excessive parental pressure along with school and private tuitions.
- Pre test anxiety score was 80% and post test score was 62% and the academic performance pre hypnotherapy intervention was 56% and post intervention the percentage went up to 67%.
- In case 1 therapy was primarily focused on giving suggestions to the subconscious on time management, preparing a study schedule of learning and revision, increasing self confidence, motivation, relaxation and giving positive affirmative statements about the exam to the subconscious mind when the child under hypnosis.
- Marked improvement in the psychological well being and coping up with exam stress was seen were reported through her personal report.

#### Case study 2: 13-year-old boy

- The boy complained of going blank during the exam, not able to get proper sleep 1 month prior to exams, feeling very anxious and sad, very fidgety, unable to plan a proper study schedule, not able to do proper revision.
- Pre test score was 90% and post test score was 66% and the academic performance pre hypnotherapy intervention was 53% and post intervention the percentage went up to 69%.
- After hypnotherapy was given the boy reported an improvement in his ability to study, concentrate and focus in the exam, be able to revise with a cool mind and able to control negative thoughts about failure

in exam.

- Marked improvement in the psychological well being and coping up with exam stress was seen were reported through her personal report.

#### **Case Study 3: 13-year-old boy**

- Child complained of forgetting and going blank in the exam, inability to relax, problem in time management, feeling very low and fearful, excessive parental pressure along with school and private tuitions.
- Pre test score was 92% and post test score was 66% and the academic performance pre hypnotherapy intervention was 55% and post intervention the percentage went up to 70%.
- Therapy was primarily focused on giving suggestions to the subconscious on time management, preparing a study schedule of learning and revision, increasing self confidence, motivation, relaxation and giving positive affirmative statements about the exam to the subconscious mind when the child was under hypnosis.
- Marked improvement in the psychological well being and coping up with exam stress was seen and reported through his personal report.

#### **Case study 4: 13-year-old boy**

- Complained about feeling depressed, not wanting to study prior to his half yearly exams, fear of failing was predominant due to his past experience in his term papers, he was unable to neither concentrate nor focus, had sleepless nights.
- Pre test score was 84% and post test score was 60% and the academic performance pre hypnotherapy intervention was 51% and post intervention the percentage went up to 68%.
- After hypnotherapy he reported significant reduction in his fear of exam.

#### **Case study 5: 13-year-old girl**

- Complained about feeling depressed, not wanting to study prior to her pre boards, fear of failing was predominant due to her past experience in her term papers, constant

pacing, feeling helpless, she was unable to concentrate and focus, had sleepless nights.

- Pre test score was 84% and post test score was 68% and the academic performance pre hypnotherapy intervention was 52% and post intervention the percentage went up to 67%.
- After hypnotherapy he reported significant reduction in her fear of exam & attitude became positivistic and self confidence improved.

#### **Case study 6: 14-year-old girl**

- Child complained of forgetting and going blank in the exam, inability to relax, problem in time management, feeling very low and fearful, easily getting angry, excessive parental pressure along with school and private tuitions.
- Pre test score was 84% and post test score was 60% and the academic performance pre hypnotherapy intervention was 56% and post intervention the percentage went up to 70%.
- Therapy was primarily focused on giving suggestions to the subconscious on time management, preparing a study schedule of learning and revision, increasing self confidence, motivation, relaxation and giving positive affirmative statements about the exam to the subconscious mind when the child was under hypnosis.
- Marked improvement in the psychological well being and coping up with exam stress was seen and reported through her personal, parents and teachers report.

#### **Case study 7: 14-year-old boy**

- Complained about feeling depressed, not wanting to study prior to his pre boards, fear of failing was predominant due to his past experience in his term papers, he was unable to concentrate nor focus, had sleepless nights, reduction in appetite.
- Pre test score was 80% and post test score was 64% and the academic performance pre hypnotherapy intervention was 50% and post intervention the percentage went up to 68%.
- After hypnotherapy he reported significant

reduction in his fear of exam.

**Case study 8: 14-year-old girl**

- Complained about feeling depressed, not wanting to study prior to her exams, fear of failing was predominant due to her past experience in her term papers, she was unable to concentrate and focus, had sleepless nights.
- Pre test score was 78% and post test score was 60% and the academic performance pre hypnotherapy intervention was 54% and post intervention the percentage went up to 68%.
- After hypnotherapy she reported significant reduction in her fear of exam and attitude became positivistic and self confidence improved.

**Case study 9: 14-year-old girl**

- Child complained of forgetting and going blank in the exam, inability to relax, problem in time management, feeling very low and fearful, excessive parental pressure along with school and private tuitions.
- Pre test score was 88% and post test score was 64% and the academic performance pre hypnotherapy intervention was 57% and post intervention the percentage went up to 69%.
- Therapy was primarily focused on giving suggestions to the subconscious on time management, preparing a study schedule of learning and revision, increasing self confidence, motivation, relaxation and giving positive affirmative statements about the exam to the subconscious mind when the child was under hypnosis.
- Marked improvement in the psychological well being and coping up with exam stress was seen and reported through her personal, parents and teachers report.

**Case study 10: 14-year-old boy**

- Child complained of forgetting and going blank in the exam, inability to relax, problem in time management, feeling very low and fearful, excessive parental pressure along with school and private tuitions.
- Pre test score was 80% and post test score

was 60% and the academic performance pre hypnotherapy intervention was 50% and post intervention the percentage went up to 67%.

- Therapy was primarily focused on giving suggestions to the subconscious on time management, preparing a study schedule of learning and revision, increasing self confidence, motivation, relaxation and giving positive affirmative statements about the exam to the subconscious mind when the child under goes hypnosis.
- Marked improvement in the psychological well being and coping up with exam stress was seen and reported through his personal report.

The level of anxiety reduced through hypnosis led to an improvement in academic performance as shown in the result table 1 and 2.

**Table-1: Pre test and post test anxiety scores**

	Pre test Scores	Post test Scores	Difference in Percentages (Post Scores-Pre Scores)
1.	80%	62%	18%
2.	90%	66%	24%
3.	92%	66%	26%
4.	84%	60%	24%
5.	84%	68%	16%
6.	84%	60%	24%
7.	80%	64%	16%
8.	78%	60%	18%
9.	88%	64%	24%
10.	80%	60%	20%

**Table-2: Pre test and post test scores of Academic performance**

	Pre test Scores	Post test ScoreS	Difference in percentages (Post Scores-Pre Scores)
1.	56%	67%	12%
2.	53%	69%	16%
3.	55%	70%	15%
4.	51%	68%	17%
5.	52%	67%	15%
6.	56%	70%	14%
7.	50%	68%	18%
8.	54%	68%	14%
9.	57%	69%	12%
10.	50%	67%	17%

## Discussion

The findings of the current study suggest that hypnotherapy proved to be very helpful in overcoming depression and improving academic performance and reducing examination anxiety.

Ergene<sup>3</sup> reported that treatment of test anxiety is quite successful in reducing the test anxiety level of clients. The most effective treatments include combination of skill-focused approaches with behaviour or cognitive approaches.<sup>4</sup> Boutin and Tosi examined the effects of four treatment conditions on the modification of irrational ideas and test anxiety in female nursing students. The treatments studied included a cognitive behavioral approach that utilized hypnosis and vivid-emotive-imagery, a hypnosis-only treatment, a placebo condition, and a no-treatment control. Statistically significant treatment effects on cognitive, affective, behavioral, and physiological measures were noted for both the Rational Stage Directed Hypnotherapy (RSDH) and hypnosis group at the posttest and at a 2-month follow-up.<sup>4</sup> Gregor<sup>5</sup> investigated factors affecting examination anxiety and aimed to increase schools' understanding of this topic. The study was a school-based initiative, evaluating intervention strategies to help secondary pupils with the self-management of their examination anxiety. The results suggest that interventions using cognitive behavioural approaches combined with relaxation helped pupils to improve their examination performance in maths. Findings also suggest an interaction between pre-anxiety level and performance, suggesting that it is not minimal, but optimal anxiety which leads to better examination performance.<sup>5</sup> Kai and Yu<sup>1</sup> studied the cognitive-behavioural hypnotic treatment for managing examination anxiety and facilitating performance. Hypnosis was utilized as an adjunct to cognitive-behavioural therapy in tackling the stress in relation to examinations, and in facilitating revision, sleep and examinations.

Although formal assessments of achievement anxiety showed only mild changes, personal reports reflected improvements in both anxiety management and performance during examinations along with changes of perspectives towards learning and examinations.<sup>1</sup> Lowe and Lee researched on the factor structure of the Test Anxiety Inventory for Children and Adolescents. It is a multidimensional measure used to assess test anxiety in elementary and secondary school students, is examined across gender. It was found that girls scored statistically significantly higher than boys on the debilitating test anxiety factors.<sup>6</sup>

## Limitations and Suggestions of the research

The sample size was small and it makes it difficult to generalize the findings. Due to logistic reasons the study subjects could not be followed for a longer duration.

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