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Behavioural Intervention in Test Anxiety

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Abstract

This study assessed the effectiveness of stress inoculation training (SIT) for test anxiety. Individuals with any psychiatric disorder, substance abuse/dependence or organicity were not included in the study. The sample consisted of five test-anxious female students, four of whom completed the therapy program. The baseline assessment consisted of a clinical interview with the subjects and parents and scores on the Hindi Test Anxiety Inventory (TAI-H) and the State-Trait Anxiety Inventory (TAI-H) and the State-Trait Anxiety Inventory (STAI-S). After twenty-five sessions of therapy post therapy measures were collected on the TAI-H and the STAI-S. There was a significant reduction in anxiety scores from pre-therapy to post-therapy assessment.

Key words -
Test anxiety,
Stress inoculation training

Test anxiety refers to the phenomenological or behavioural responses associated with concern about possible failure. It is a construct that involves the relationships between subjective distress, cognitive disruptions, behavioural avoidance and physiological arousal. Test anxiety is a debilitating condition that interferes with performance and leads to consistent misinterpretation of the intelligence and aptitude of test anxious students [1]. This concept has been understood in terms of two components - Worry and Emotionality [2]. Worry refers to the cognitive manifestations of anxiety. It describes the negative cognitions regarding the individual's performance, for example, harmful consequences of failure and evaluating one's ability relative to the ability of others. Emotionality, on the other hand, refers to the individual's perception of autonomic arousal, for example, sample palms, muscle tension and increased heart rate. This definition forms the rationale for the use of stress inoculation training (SIT) [3] which involves developing the client's cognitive and relaxation and coping skills.

Aim and Objective

The present study was an attempt to assess the efficacy of SIT in the management of test anxiety.

Sample, Materials and Procedure

The sample consisted of four female test anxious students in the range of 13-18 years. All the subjects were from a middle socio-economic status background. They had no psychiatric disturbance, substance abuse/dependence or organicity. None of the subjects had undergone any form of therapeutic intervention prior to the present study. The sample was drawn from schools and from the NIMHANS - child and adolescent mental health unit.

The tools used for assessment were the Hindi Test Anxiety Inventory (TAI-H) [4] and the State-Trait Anxiety Inventory, State Form (STAI-5) [5]. The TAI-H is a 20 item self report inventory that measures individual differences in test anxiety as a situation-specific anxiety trait. In addition to measuring individual differences in anxiety proneness in test situations, the TAI subscales - TAI-W and TAI-E - measure worry and emotionality respectively. The subjects are asked to rate the frequency of each item on a 4 point scale. The range of scores varies from a minimum of 20 to a maximum of 80.

The STAI-S was used as a measure of the level of anxiety before and during examinations and tests. It consists of items and the scores range from a minimum of 20 to a maximum of 80, with a high score indicating high state anxiety.

The baseline assessment was done with the help of the TAI-H, STAI-S and a clinical interview. The TAI-H and the STAI-S were readministered post-therapy. Following the baseline assessment each subject attended 25 sessions of therapy. Each session lasted for an hour on the average. The intervention techniques used were SIT and behavioural counselling. SIT consisted of 3 phases:

(i) Education and reconceptualization

(ii) Skills acquisition and rehearsal: This phase focused on the acquisition of relaxation and cognitive c [6], self monitoring of maladaptive thoughts, cognitive restructuring, and task-oriented problems solving strategies. In addition, the subjects maintained a s stress dairy, information from which was utilised for the acquisition of coping skills

(iii) Application, focused on learning to utilise the acquired coping skills to cope with anxiety aroused by imagining stressful situations related to examinations and tests and also in actual situations.

Behavioural counselling was imparted to the subject's parents for the purpose of creating a better understanding of the subject's problem, and to advise them about study-oriented interactions with their children.

Progress in therapy was assessed using the t-test for related samples. The scores at pre- and post-therapy assessments were used for this purpose. Qualitative measures such as reports by the subjects and their parents were also made use of. It can be seen from Table I that therapy brought about significant improvement in test anxiety. The anxiety scores of the subjects after therapy were comparable to the normative data [7].

Table I - Pre and post-therapy assessment scores of the subjects

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Note TAI-H=Test Anxiety Inventory, Total;
TAI-W=Test Anxiety Inventory, Worry;
TAI-E=Test Anxiety Inventory, Emotionality;
STAI-S=State - Trait Anxiety Inventory, State Form.

One month after the end of therapy, the TAI-H was readministered. The mean anxiety scores at the

follow-up showed a decline relative to those at the end of therapy. In particular, the mean scores of test anxiety, worry and emotionality were 39.25, 13.25 and 15.0 respectively. The subjects also reported an enhanced sense of competence in coping with test situations and in staying task-oriented when anxious, increased efficiency in studying and improvement in problem solving skills. They also reported improvement in the marks and grades in the examinations following therapy.

An important feature of this study was the behavioural counselling for subjects' parents as they are frequently confronted with test anxiety and its detrimental effects. They have to act as 'layman-therapists' and support their children. An understanding of the nature of test anxiety helped modify those interactions that the subjects found anxiety provoking and enabled the parents to be more supportive. Pleog-Stapert and Pleog [8] also report that providing parents with background information and advice about study oriented interactions is beneficial.

The results point towards the feasibility and effectiveness of SIT in the management of test anxiety. Self-report measures as well as performance indices, the improvement in marks, give evidence of the effectiveness of therapy. The followup data indicate that during therapy a learning process in coping with test anxiety has been started. The major limitations of the study have been a small sample size and the lack of a control group. The use of a larger sample and the inclusion of a control group would help to arrive at more valid conclusions.

It is not possible to tell exactly what aspect of the therapy program can be the said to be most effective. Probably all the components have an interactive effect. The inclusion of one component might reinforce the effects of another. However, future studies might concentrate on looking for the differential effectiveness of the components of the therapy program. A therapy program of a shorter duration could also be developed. This would be beneficial in view of the reported difficulty of test - anxious students in maintaining commitment to therapy over time [9] and the large number of drop-outs before the beginning of therapy seen in the present study.

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