

## COPING CAT PROGRAM FOR SCHOOL CHILDREN EXPERIENCING STUDY ANXIETY: A CASE FROM PAKISTAN

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### **Abstract:**

Study anxiety is one of the many issues that has a debilitating effect on the student's academic performance. In a country like Pakistan, where school psychology is still in initial stages of recognition, there appears to be a need to identify and focus on supporting the children facing these issues. In this research, we aim to test the efficacy of Coping CAT program for school going children experiencing study anxiety. For this purpose, the study was conducted in two phases. In phase I, the participants experiencing study anxiety were identified. Sample of 232 (126 males, 106 females) was purposively selected from a private school of Lahore, Pakistan. The participants who scored higher on Study anxiety scale were selected for phase II. In phase II, a sample of 16 students both male (n=8) and female (n=8) were identified. The sample was then divided into four groups; two groups were experimental group (separate for boys and girls) while other two were control groups. Therapeutic intervention for experimental groups comprised of 14 sessions over a period of 9 weeks. Paired sample t-test indicated that Coping CAT intervention significantly reduce the level of study anxiety in both experimental groups (boys and girls). The results showed the effectiveness of program for school going students who have problem of study anxiety.

**Keywords:** Study anxiety, school going children, coping CAT program, CBT.

Anxiety is one of the largest groups of emotional and behavioral problem experienced by children and it has a deteriorating impact on every day functioning particularly educational activities (Stallard, 2009). Due to the debilitating effects of it, this area has been the focus of attention of professionals around the world but unfortunately, this has not been addressed in south Asian countries where School Psychology has yet to be established as a distinct field. In Pakistan, School Psychology is in the initial stages of its development and not much work is being done on the intervention of emotional, and behavioral issues faced by school children. We planned this research to examine the effectiveness of a cognitive based Coping Cat program with school children to help them deal with study anxiety.

Study anxiety is associated with academics and related activities which provoke anxious behavior and negatively influences the student's performance (Zeidner, 1998). The symptoms include physical, cognitive, behavioral and emotional (Vitasari et al., 2010).

Pakistan is among the low and middle income countries of South Asia with an approximate population of 200 million. The estimated prevalence rates of child and adolescent's mental health problems in Pakistan are much higher (35%) than the global

prevalence estimates of 10–20% (Hamdani et al., 2021). The researches (Mansoor, & Ahmad, 2014; Saleem, & Mahmood, 2013) conducted in different cities of Pakistan to revealed that school going children are experiencing emotional and behavioral problems and among these, anxiety is one important challenge. Realizing the debilitating effects of anxiety on the academic performance of school children, we planned to test the effectiveness of Coping Cat program in our school children.

Coping Cat Program (Kendall & Hedtke, 2006) is an evidence based Cognitive Behavior Therapy (CBT) program for children who experience anxiety. It has proposed a F.E.A.R. plan where, F stands for Feeling Frightened (help children to focus on the somatic responses related to the anxiety provoking situation), E stands for is Expecting Bad Things to Happen (helpful for children to detect anxious cognitions), A- Attitudes and Actions (encourages children to activate learned coping skills), R stand for Results and Rewards (help children to rate their change of behavior and attitude and receive praise for facing their fears) (Beidas et al., 2010).

Coping Cat is considered to be an effective intervention for children with study anxiety through a range of normal or clinical population (McNally et al., 2013). Lenz (2015), in a Meta-analysis, reviewed the effectiveness of the Coping Cat program for management of anxiety symptoms in children and adolescents. He reviewed 19 randomized controlled studies and total 1,358 participants. Results showed that Coping Cat is an effective treatment plan for reducing the anxiety symptoms in children.

## **Rationale**

The empirical evidence from Pakistan suggests that anxiety is a significant issue for children in general and specifically for school children. Although there has been some research done on estimating the magnitude of this problem in Pakistan but no work till date has been done on the management of anxiety in school children. In order to fill this gap in literature and to provide the schools with a direction to deal with this issue, we designed this research. The main aim was to explore the applicability and effectiveness of the Coping cat program with school age children experiencing study anxiety.

## **Material and method**

### **Phase I: initial screening**

#### **Sample.**

The sample of 232 school going children were selected through purposive sampling technique. The data was collected from private school with two branches (boys and girls) in Lahore city of Pakistan. The age range of the participants was 7- 14 years ( $M=12.93$ ,  $SD=1.07$ ) and they were students of 6<sup>th</sup> to 8<sup>th</sup> classes. The percentage of boy and girl participants were (54.3%) and (45.7%) respectively.

## Instruments

**Study anxiety scale.** It is an indigenous scale for measuring study anxiety and was developed by Maqsood and Ijaz in 2013. It has three factors: fear of evaluation, behavioral manifestation, and memory interference. The instrument consisted of 28 items with a rating scale of (0-3). The reliability of the scale was .91 and the concurrent validity was found to be .68.

## Procedure

Before commencing the study the school administration was approached for permission of data collection from each branch. After that, students were approached and informed about the nature, process and aim of the study. A letter of information was also sent to the parents. Only those participants were selected who provided the written consent to be the part of the study. They were provided with the study anxiety scale. Detailed instructions were given regarding filling the scale and after administration of the scale, debriefing was done and questions by the students were answered.

## Results

Data collected in the phase I was analyzed using SPSS and results indicated that 31.5% of participants were experiencing a mild level of study anxiety, 57.8% participant have a moderate and 10.4 % participants experience the severe level of study anxiety.

## Phase II: Intervention

In the second phase, the parents of the participants who scored between moderate to severe category of study anxiety were contacted again for permission. Although parents were also provided with the information booklet containing all the details of the intervention program but majority of the parents did not consented to the procedures which is a limiting factor and suggests more intensive interaction with parents to convince them about the benefits of the program. Another factor that limited the participation rate was that intervention was scheduled after the regular school classes. Many parents and students were not willing to stay back for the group sessions. Due to these factors, only 16 students consented to participate.

## Sample

The sample consisted of 16 students including boys (n=8) and girls (n=8). The sample was divided into four groups (two group for boys and two for girls), where each group had 4 participants. The groups for boys and girls were conducted separately keeping in mind comfort level of both groups.

## Step I: Pre treatment assessment

**Semi-Structured interview.** A semi- structured interview was conducted with the student and the teacher to take participant's history, nature of their problem, the contributing factors, participant's academic performance, and their classroom behaviors.

Subjective rating of problem. The participants were requested to provide Subjective ratings on 1-10 point scale to identify the severity of anxiety as perceived by them. Client was explained about 1 to 10 rating scale (Wolpe1969).

### **Step II: Application of intervention.**

Coping CAT program consisted of two parts; FEAR plan and exposure task. The techniques used for implementation of FEAR plan include:

#### i) FEAR plan

- F stands for Feeling Frightened.
- E stands for Expecting Bad Things to Happen.

These tasks were achieved using the psychoeducational techniques (e.g. anxiety cycle and Adversity, Belief and consequence [ABC] model)

- A stands for Attitudes and Actions. Encourages children to activate learned coping skills such as relaxation and deep breathing exercises, Mirror technique, productive and unproductive worry, coping statements and behavioral skills training.
- R stands for Results and Rewards. Prompts children to rate their change of behavior and attitude and receive praise or an award for facing their fears.

#### ii) Exposure Task

- Children are taught to use the F.E.A.R. plan and then apply it to exposure tasks.

Each participant was exposed to the specified anxiety-provoking situation, which was identified during initial sessions through hierarchy.

iii) Homework assignments. The participants were given homework assignment to face the anxiety provoking situations in a hierarchical order.

Program involved 14 sessions, each session being 45 minutes long. The sessions were held twice a week for each group.

### **Step III: Post treatment assessment.**

The post intervention assessment was done by re-administrating the study anxiety scale, subjective rating of the problem for assessing the change in participants after getting treatment.

### **Procedure**

Before initiating the process of intervention, permissions were sought from the school authorities to carry out the outcome study. The intervention plan continued for 9 weeks. It was carried out in a group form.

## **Ethical Consideration**

Permission was duly taken from school authorities and parents of participants before data collection. Informed consent was taken from all participants and school authorities. The participants were informed about the nature and purpose of assessment and research in understandable language and detailed information was shared about the possible benefits and rights and responsibilities of participants. Special precaution were taken to respect human dignity, privacy and autonomy.

## **Results**

### **Hypothesis 1**

The study anxiety scores and subjective ratings of experimental group will decrease after intervention than control group participants.

In order to test these hypotheses, paired sample t-test was used.

Table 1 about here.

Table 1 shows that there was a significant decrease in the scores of study anxiety scale of experimental group before and after the coping CAT intervention. On the other hand, no significant differences were observed in the scores of the control group at the pre-treatment level and post treatment level on study anxiety scale.

Results also show that there was significant differences on subjective ratings of subjects with pre intervention scores on experimental group was significantly higher than after intervention scores. On the other hand, control group pre-treatment responses and post treatment responses showed no significant difference.

### **Hypothesis 2**

The study anxiety and subjective ratings of both male and female experimental groups will decrease after intervention than control group participants.

Table 2 about here.

Table 2 shows that Coping Cat intervention significantly reduced the level of study anxiety among both boys and girl school going children equally. The scores at pre and post assessment clearly indicate that the level of study anxiety reduced post intervention irrespective of gender. Similar findings were observed in the subjective ratings of boys and girls participants of experimental group.

On the other hand, no significant differences were found on the scores of study anxiety and subjective ratings of both boys and girls in control group.

## **Discussion**

The Coping CAT program is an evidence based CBT to help children identify their anxious feelings and equip them with strategies to cope with anxiety provoking situations. The

present study was conducted to explore the effectiveness of Coping CAT program for children experiencing study anxiety.

**The results suggested that the nine-week Coping CAT program resulted in overall decrease in the level of anxiety experienced by school going children. Comparing pre-treatment to post treatment responses, the children who received Coping CAT program intervention showed significant reduction in the anxiety symptoms** whereas no significant improvement was seen in control group who did not receive any treatment. This showed that CBT based Coping CAT program is effective in treating study anxiety among school going children because it helped in identifying the anxious feelings and thoughts, which trigger study anxiety and practices those strategies that help in dealing with anxiety provoking situations.

Similar findings have been found by Ferris (2017) in their experimental research with three participants, who came with the diagnosis of Autism Spectrum Disorder (ASD) along with the symptoms of obsessive compulsive disorder. The results revealed that modified Brief Coping Cat program is an effective school-based intervention to help reduce anxiety symptoms of children with ASD. Similarly, Pearson (2017) also conducted the study testing the effectiveness of coping CAT program with three participants. One participant was 12 years old male with the symptoms of hyperactive, Combine presentation with social anxiety Disorder. Second student 11 years old male with Attention Deficit/Hyperactivity Disorder, conduct disorder, Child Onset Type (CD), Generalized Anxiety Disorder (GAD) and mood problem and last student 11 years old with problem of verbal and physical aggression. This study results shows that Coping CAT program effectively reduce the level of anxiety in all three participates.

## Conclusion

The study was carried out to explore the effectiveness of Coping CAT program for school going children with study anxiety. It has been concluded from the findings that Coping CAT program is significantly effective school based intervention to help reduce the anxiety symptoms of both male and female school children. This research has provided a preliminary evidence of successful implementation of CBT based program in schools and can be expanded to improve the academic performance of children.

## Limitations and recommendations

Due to limited time and resources the sample was drawn only from Lahore city of Pakistan and only from two schools, therefore the sample was smaller in diversity. The study must be conducted on large sample drawn from other cities of Pakistan. The parents could not be involved in parent's sessions due to their lack of interest and motivation to be part of the program. The aim of the study was to focus on immediate effects of treatment in controlled setting, so the long term effects of program were not explored. Further researches are needed to examine the maintenance of treatment effects as well as generalize change. It must be kept in mind that the study was conducted on one school and the findings can only be generalized to children who share similar characteristics.



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## Declaration of interest

This work has not been funded and there has been no conflict of interest.

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**Table 1: Paired sample t-test comparing the mean differences before and after the intervention (N=16)**

Variables	Pre-Responses		Post Responses		t(d)	p	95% CI		Cohen's D
	M	SD	M	SD			LL	UL	
Experimental SAS	53.12	4.67	35.12	3.97	13.6(7)	.001	14.87	21.12	4.2
SR	33.75	7.54	23.25	6.04	12.7(7)	.000	8.55	12.44	1.5
Control SAS	44.37	12.14	44.75	12.12	-1.4(7)	.19	-.99	.247	0.03
SR	38.12	1.55	37.87	1.35	1.00(7)	.35	-.34	.841	0.1

Note. SAS=Study Anxiety Scale, SR=subjective rating, CI= confidence Interval, LL=lower limit, UL= upper limit

**Table 2: Mean, standard deviation and t value of pre and post intervention scores of gender wise on all experimental and control groups (N=16)**

Variables	Pre-Responses		Post-Responses		t(d)	p	95% CI		Cohen' s D
	M	SD	M	SD			LL	UL	
<b>Male Experimental</b>									
SAS	51.00	4.24	37.75	5.85	12.8(3)	.001	9.96	16.53	2.6
SR	30.50	6.45	21.00	4.54	7.9(3)	.004	5.7	13.2	1.7
<b>Female Experimental</b>									
SAS	52.75	2.06	40.00	2.16	9.6(3)	.002	8.56	16.9	5.3
SR	37.00	7.25	25.00	7.14	11.0(3)	.002	8.1	14.8	1.6
<b>Male Control</b>									
SAS	37.50	5.4	35.74	5.73	-1.0(3)	.39	-1.04	.545	0.3
SR	37.25	1.25	38.00	2.3	-.87(3)	.44	-3.4	1.9	0.4
<b>Female Control</b>									
SAS	53.25	10.21	53.75	9.70	-1.0(3)	.39	-2.09	1.09	0.0
SR	39.0	1.4	38.5	1.2	1.0(3)	.39	-1.0	2.0	0.3

SAS=Study Anxiety Scale, SR=subjective rating, CI= confidence Interval, LL=lower limit, UL= upper limit, \*\*\*p<.001, \*\*p<.01, \*p <.05.