Alia Bashir \* Muammad Naeem Mohsin \*\* Fariha Sohil \*\*\*

# Evaluate the Effectiveness of Cognitive Behavioral Interventions to reduce the severe level of Depression among University Students

#### Abstract

This research paper evaluates the effectiveness of cognitive behavioral interventions to reduce the levels of depression among university students. This research was accomplished by the purpose to find out the levels of depression among university students, select and implement the CBT techniques through therapy sessions conducted by a psychologist and evaluate the effectiveness of cognitive behavioral interventions to reduce the levels of depression among university students. One student who confirmed her strong written obligation to take part in the intervention program was selected for study. This study helped out to fill up the gap between better adjustment of students through coping strategies and proper application of those strategies. It capitalized on the cognitive abilities of students by providing behavioral interventions which were more realistic rather than imaginary. Psychologist played a vital role in the whole study; select different behaviour modification techniques, implement the CBT techniques through therapy sessions and evaluate the effectiveness of those techniques through post rating. Students' performance was increased by the use of CBT techniques.

Key Words: Depression, Interventions, Implement, Evaluate, Effectiveness.

#### Introduction

Cognitive Behavioral Therapy (CBT) is a psychological method of treatment that was evolved through scientific research. All of the elements of CBT have been examined by researchers to find out if they are useful in this regard. The CBT model puts stress that an individual does not undergo emotional disturbance

<sup>\*</sup> Alia Bashir, Ph.D Scholar, Department of Education, Govt. College University, Faisalabad

<sup>\*\*</sup> Dr Muammad Naeem Mohsin, Associate Professor, Department of Education, Govt. College University, Faisalabad.

<sup>\*\*\*</sup> Fariha Sohil, Ph.D Scholar, Department of Education, Govt. College University, Faisalabad.

because of situation but his personal understanding or stance regarding any situation. CBT focuses on eliminating negative perceptions and attitudes with help of knowledge. There are various theoretical directions for counseling. Usually this method takes place in clinical backgrounds, the CBT has a useful treatment to mitigate several childhood disorders like depression, anxiety and disturbed behaviors should not be overlooked (Kazdin & Weisz, 1998; Kendall, 2006; Ollendick & King, 2004; Weisz & Kazdin, 2010). Use of CBT with disorders like post-traumatic stress disorder, substance abuse, eating disorders, problems related schools and health conditions clarifies impending for advance exploration.

According to Coleman (1998), depression is an emotional condition distinguished by acute sadness, depressing thoughts, feelings of worthlessness, failure of hope and a lot of nervousness. The World Health Organization has confirmed that depression is the primary reason of disability due to its physical, emotional and social impacts (WHO, 2007). The use of cognitive behavioral strategies can significantly reduce the types of problematic behaviors that frequently lead to school moratoria or expulsion leading to school dropouts. The students with expressive dispositions or new kinds of disabilities, cognitive behavioral strategies to train students in the direction of talk about proper behavior, role-play and self-talk order to solve problems can well help to reduce the completion of aggression as a school barrier.

### Modern Researches on Cognitive Behaviour Therapy for Depression

Significant experimental facts support the employment of CBT in the treatment of core depression disorder. Such commonly considered procedures consist of Beck's cognitive and behavioral treatment series supported the efforts of Lewinsohn (Craighead *et al.*, 1998). Behavior treatment series intends to enlarge satisfying activities whereas lessens the objectionable experiences, although CBT also focuses on depressing feelings about one-self and the surroundings with cognitive reformation. These treatments are managed more than 12 to 20 individuals or in cluster sessions and far analysis are accessible to maintain this practice (Craighead *et al.*, 1998).

A small number of researches have explored whether or not these extremely successful treatments could also be condensed for utilization in major distress and different population backgrounds. Scott *et al.* (1997) presented six weeks CBT sessions (duration of each one is about half-hour) and written instructive concern to major distress clients diagnosed with major depression. Clients were erratically allocated to also this treatment order or to make usually in the main treatment center. The conclusions revealed that the subjects of treatment group recovered quickly than the control group right away after treatment and these increases were prolonged at one year record. Likewise, Katon *et al.* (1996) presented a mutual

care treatment for depression clients in prime medical care environment. There were four to six persons integrated in CBT Treatment sessions. At last, a concise six session group CBT becomes known to be successful when supervised without research social mental health care treatment situation (Peterson & Halstead, 1998); however this research was an uncontrolled experiment. Although these researches maintain the effectiveness of concise treatment, they do not explain how these increases evaluate to prolonged CBT. However depression is a less restricted disorder with less particular vital traits to focus on treatment, short treatments could not be as valuable as long. But other than, experts could effectively recognize and challenge prime non-adjusted feelings in a short duration, this method might prove favorable.

Short CBT could be helpful for children depression. Wood *et al.* (1996) presented five to eight sessions of CBT or relaxation therapy solely to manage the children and adolescents with diagnosed depression disorder. At post-treatment, CBT was certainly better to relaxation therapy management; however the collaborative treatments were connected with more dealings of six month follow-up. Weisz *et al.* (1997) proposed an eight session CBT for children depression that designed to improve incentive and lessen punishment by teaching children to manage stress in their settings similarly to regulate their partial responses to unwanted situations. Primary school children with minor to moderate levels of depression acquired eight sessions of cluster CBT or without treatment management.

### Methodology

### **Participants**

One student was selected who showed strong written obligation to take part in the study. The age of the student is 23 years. The demographic information of participant student is given in table1.

Table 1. The demographic information of participant student

Name of Students	Age (in years)	Gender	Level of Depression	Geographical Situation	Socio Economic Status	Program	Department	Semester	Number of Sessions
A.A	23	Female	Severe	Urban	Middle Class	BS Honors	Geography	4 <sup>th</sup>	18

Table 1 shows the different characteristics like age, gender, geographical situation and socio-economic status of the student.

#### Instrumentation

Following instruments were used to collect the data.

- 1. Depression, Anxiety, Stress Scale (DASS)
- 2. Beck Depression Inventory (BDI)
- 3. Clinical Interview
- 4 Consent Form
- 5. Goal Attainment Scale (GAS)
- 6. The Task Importance Scale
- 7. Rating Moods Form
- 1. Depression, Anxiety, Stress Scale (DASS)

The main tool of the study was DASS. Translated standardized DASS in Urdu version by Maria Habib from University of the Punjab, New Campus Lahore, having 42 items was used to assess the existing level of depression among university students and to screen out the students for study purpose.

### 2. Beck Depression Inventory (BDI)

Beck Depression Inventory formed by Aaron T. Beck. BDI is comprised on 21 items of multiple choices or a self report inventory and the most broadly utilized psychometric test for evaluation the severe depression. It is obvious a modify development for mental health professionals, who examined depression from a psychodynamic point of view, instead of existing cause in the personal considerations of patient. Beck Depression Inventory is commonly exercised for assessing depression across different cultures. In spite of broadly utilization of Beck Depression Inventory, there is unexpectedly lack of practical research on psychometric confirmation of scale in Pakistan.

#### 3. Clinical Interview

A clinical interview is a conversation between psychologist and patient which is intended to facilitate the psychologist to make a diagnosis and treatment plan for the patient. It is generally entitled a discussion with justification. There are some important differences in common discussion and clinical interview. Initially,

clinical interview has a fundamental function to make a diagnosis of the patient. If he/she is making a conversation with his/her best friend, it is a simple conversation and the conversation does not have a focal point and could ramble around to any topic. Secondly, in a clinical interview the responsibilities are obviously specific. There is a psychologist and a patient. Lastly, a clinical interview takes place in a specific time frame. When the patient has a discussion with her best friend, they could start and end the discussion when they would like.

#### 4. Consent Form

Consent Form was developed to get the consent of students for involvement in the therapy sessions. Students gave written approval on form and showed strong obligation to facilitate the researcher and psychologist.

### 5. Goal Attainment Scale (GAS)

Goal Attainment Scale is a therapeutic technique that suggests to the development of a written transcribe guide between the client and the therapist which exercised for examining the client's improvement. Goal Attainment Scale was initially formed by Thomas Kiresuk and Robert Sherman in counter of the large selection of assessment models about mental illness and treatment. A modified form of Goal Attainment Scale was developed by Mohsin (2009) to settle down goal attainment level of children with intellectual disabilities of Pakistan. Goal Attainment Scale has been utilized for various populations and apprehensions as well as individual and group counseling (Woolwine, 2011). The researcher used a modified form of GAS. The most important purpose of the scale was: i) to identify the improvement of clients on a particular goal in therapy sessions, and ii) to give a framework for classification of goals, improvement and product of therapy sessions. The improvement of clients was measured through Goal Attainment Scale by means of researcher during therapy sessions. There were five levels in Goal Attainment Scale (1-5): much less successful than expected (score=1), somewhat less successful than expected (score=2), successful (score=3), somewhat more successful than expected (score=4), much more successful than expected (score=5).

### 6. The Task Importance Scale

The Task Importance Rating Scale was developed by Baine (1991) to settle the tasks for clients. The tasks were evaluated on four levels: High, medium, low and none. The importance of each task was evaluated within therapy sessions through clients by means of its involvement toward: "i) Increasing the social adequacy, ii) Learning additional social skills, iii) Improving mood regulations, iv) Learning endurance skills to cope up with problems, v) Learning functional skills, vi) Improved diversity of environment, viii) Improved diversity of environment, viii)

Improving confidence ability, ix) Increasing ability to fulfill frequent opportunity to perform their education tasks, x) Improving mental health, xi) Increasing opportunity to enjoy social, emotional amusement of life, xii) Improving quality of thoughts" (Baine, 1991). A modified form of The Task Importance Scale was used by Mohsin (2009) to set the tasks for children.

### 7. Rating Moods Form

Rating Moods Form describes a current incident. Participant judge the strength of his/her mood at that time when the incident happened on a scale of 0-100. At the end/bottom of form a list is given of different moods if the participant needs help.

### **Psychological Intervention Plan**

The researcher takes into service a qualified psychologist (MS Clinical Psychology) for treatment of the clients according to their level of depression. The psychologist treated them during sessions according to their problems, conditions and symptoms were pointed out in the pre-test scores.

#### Process of Research

The research consists of following four steps:

- i. Assessment of students through different psychological tests like DASS & BDI.
- Select different CBT techniques according to the level of students' depression.
- iii. Implement various CBT techniques according to the level of students' depression.
- iv. Evaluate the effectiveness of different CBT techniques through Goal Attainment Scale.

#### **Analysis of Sessions**

Different cognitive behavioural strategies were implemented through therapy sessions, to evaluate the effectiveness of strategies and success of sessions was evaluated through:

- i. Number of goals achieved by each student as measured by Goal Attainment Scale.
- ii. Effectiveness of sessions as determined by Rating Moods Scale.

Evaluate the Effectiveness of Cognitive Behavioral Interventions to reduce the severe ......

- iii. Responses of the students about effectiveness of sessions obtained through post testing using DASS.
- iv. Assess the achievement level of different selected tasks through Task Importance Scale.
- v. Evaluate the effectiveness of different CBT techniques used in therapy sessions through Goal Attainment Scale.

### RESULTS AND FINDINGS

#### **Effectiveness of Sessions**

There were two students involved in therapy session. To evaluate the effectiveness of therapy session, the scores of students were differentiated through pre-test and post-test.

Table 2. The Difference of Pre-test and Post-test Scores of Depression

Names of Student	Pre-test Scores	Post-test Scores	Difference of Scores
1. (A.A)	26	11	15

Table 2 shows that there is improvement in the student's pre-test and post -test scores of depression.

### Results of the Case Study

#### Goals for Client A.A.

The following goals were selected for client A.A:

- 1. Improve social activities/relationships
- 2. Improve confidence level/ability

### Tasks for Client A.A

The following tasks were selected for client A.A:

- 1. Increasing the social adequacy
- 2. Improving mood regulations
- 3. Learning endurance skills to cope up with problems

- 4. Improved diversity of environment
- 5. Increasing opportunity of interactions with others
- 6. Improving mental health
- 7. Increasing opportunity to enjoy social, emotional amusement of life
- 8. Improving quality of thoughts

### Rating Moods of Client A.A

The intensity of different moods was rated on a scale of 0-100 percent, these different moods and their ratings were following:

Table 3. The Intensity of Different Moods of Client A.A.

Performance Different Moods	Related	(0-100%) 1 <sup>st</sup> week	2 <sup>nd</sup> week	3 <sup>rd</sup> week	4 <sup>th</sup> week	5 <sup>th</sup> week	6 <sup>th</sup> week
Crying Spells		55%	50%	46%	40%	32%	25%
Sadness		70%	64%	56%	48%	42%	35%
Restlessness		60%	54%	50%	44%	38%	30%
Hopelessness		55%	50%	44%	38%	32%	25%
Anxious		75%	70%	62%	54%	46%	35%
Distress		70%	64%	56%	48%	40%	30%
Poor Concentration		75%	68%	60%	52%	44%	35%
Loneliness		65%	60%	54%	46%	38%	30%
Stress		70%	62%	54%	48%	40%	30%

Table 3 shows the intensity reduction in different negative moods like crying spells, sadness, restlessness, hopelessness, anxious, distress, poor concentration, loneliness and stress.

### **Evaluation of Intervention Plan**

At the end of 2 months therapy sessions, client A.A achieved 2 goals.

**Evaluation of Task "Improve social activities/relationships":** During sessions the client's performance was recorded on Goal Attainment Scale. Goal was achieved in 18 sessions.

Table 4. The Performance of Client A.A on GAS for Task no.1

Sessions	Score on GAS	Sessions	Score on GAS	
1	1	10	3	
2	2	11	4	
3	2	12	4	
4	3	13	3	
5	2	14	3	
6	3	15	4	
7	2	16	4	
8	2	17	5	
9	3	18	5	

Table 4 shows the analysis of performance on GAS of task no.1. It also shows the low scores of GAS at initial sessions and high scores of GAS at ending sessions. It shows the improvement in performance of client.

The mean score of client's performance as determined by GAS was 3.05. Which shows her overall performance up to level 3 (Successful) of GAS. The analysis of performance shows that the task was completed in 18 sessions.

**Evaluation of Task "Improve confidence level/ability":** During sessions the client's performance was recorded on Goal Attainment Scale. Goal was achieved in 16 sessions.

Table 5. The Performance of Client A.A on GAS for Task no.2

Sessions	Score on GAS	Sessions	Score on GAS	
1	1	9	3	
2	2	10	4	
3	2	11	4	
4	3	12	3	
5	3	13	3	
6	2	14	4	
7	3	15	4	
8	3	16	5	

Table 5 shows the analysis of performance on GAS of task no.2. It also shows the low scores of GAS at initial sessions and high scores of GAS at ending sessions. It shows the improvement in performance of client.

The mean score of client's performance as determined by GAS was 3.06. Which shows her overall performance up to level 3 (Successful) of GAS. The analysis of performance shows that the task was completed in 16 sessions.

## Findings from Intervention Program of Client A.A

At the end of 18 sessions the client achieved 2 goals. The client's performance was recorded on GAS. The goals were achieved in 18 sessions. The major findings from Goal Attainment Scale (GAS), Task Importance Scale and Rating Moods Scale were as under:

- 1. The mean score of client's performance for two tasks as determined by GAS was 3.055, which shows the overall performance of client up to level 3 (Successful) of GAS.
- 2. The achieved goals were following:
  - i. Social activities/relationships were improved as determined by GAS.
  - ii. Confidence level/ability was improved as determined by GAS.
- 3. The client achieved five tasks out of eight as determined by Task Importance Scale.
- 4. The client achieved 62.5 percent tasks.
- 5. The achieved tasks were following:
  - i. Mood regulations were improved.
  - ii. Endurance skills were learned to cope up with problems.
  - iii. Mental health was improved.
  - iv. Opportunities were increased to enjoy social, emotional amusement of life.
  - v. Quality of thoughts was improved.
- 6. The client's performance was improved in sense of moods. Different moods' rating was evaluated through Rating Moods Scale.

- i. Crying spells were decreased from 55 to 25 percent.
- ii. Sadness was decreased from 70 to 35 percent.
- iii. Restlessness mood was decreased from 60 to 30 percent.
- iv. Hopelessness was decreased from 55 to 25 percent.
- v. Anxious mood was decreased from 75 to 35 percent.
- vi. Distress condition/situation was decreased from 70 to 30 percent.
- vii. Poor concentration was decreased from 75 to 35 percent.
- viii. Loneliness was decreased from 65 to 30 percent.
  - ix. Stressed conditions were decreased from 70 to 30 percent.

### **Conclusions**

### Conclusion from Intervention Program of Client A.A

At the end of one and half months' intervention program period, client A.A was refer for assessment and management of some psychological problems like low mood, weeping episode, low apatite or fatigue, feelings of guilt, irritability, low confidence, disturbed sleep, muscles tension, restlessness, hopelessness, poor concentration, emptiness and loneliness or decreased interest interact with others and headache. The client was assessed through psychological tests and the results revealed that the client's tentative diagnose features of Persistent Depressive Disorder with severe level of Anxious Distress. The client's prognosis was satisfactory and psychological problems were managed with proper therapeutic management/intervention plan.

#### Recommendations

There is a need of more researches with similar or different symbols of depression. In Pakistan many students with these symptoms does not share their disturb feelings and emotions with teachers or parents. It is strongly recommended that there is a need of qualified psychologists to perform their duties in educational institutions rather than their clinics because students feel hesitation to go in clinics. Government should appoint qualified psychologists in educational institutions to help students in solving their academic as well as personal problems. Teachers should aware of those students who are suffering such problems. Educational institutions and teachers should keep in touch with health workers, professionals

and qualified psychologists to solve the problems of students. Students should find opportunities in community and institutions for different activities such as social activities and interaction with others, recreational and other leisure activities, health and physical activities, spiritual and religious activities. There should be adequate arrangements for students in institutions for proper excursion of their feelings and emotions. More information should be provided to students to know about their mental disorders and they should be consulted with psychologist to solve their problems. Parents should meet regularly with teachers and psychologists to know their children's special needs and problems. It will change the attitude of people towards those persons who are suffering some psychological problems. Parents should take care of their children and properly look after those children who are suffering such mental and emotional problems.

#### References

Coleman, J.C. (1998). Abnormal Psychology and Modern Life. Los Angles: Scott Foresman and Co.

Craighead, W.E., Craighead, L.W., & Ilardi, S.S. (1998). Psychosocial treatments for major depressive disorder. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work* (pp. 226–239). New York: Oxford University Press.

Dawe, S., & Harnett, P. H. (2007). Improving family functioning in methadone maintained families: Results from a randomised controlled trial. *Journal of Substance Abuse Treatment*.

Katon, W., Robinson, P., Von Korff, M., Lin, E., Bush, T., Ludman, E., Simon, G., & Walker, E. (1996). A multifaceted intervention to improve treatment of depression in primary care. *Archives of General Psychiatry*, *53*, 924-932.

Kazdin, A.E., & Weisz, J.R. (1998). Identifying and developing empirically supported child and adolescent treatments. Journal of Consulting and Clinical Psychology, 66, 19–36.

Ollendick, T.H., & King, N.J. (2004). Empirically supported treatments for children and adolescents: Advances toward evidence-based practice. In P. M. Barrett & T. H. Ollendick (Eds.), Handbook of interventions that work with children and adolescents: Prevention and treatment (pp.3–25). New York, NY: John Wiley & Sons.

Peterson, A.L., & Halstead, T.S. (1998). Group cognitive behavior therapy for depression in a community setting: A clinical replication series. *Behavior Therapy*, 29, 3–18.

Scott, C., Tacchi, M. J., Jones, R., & Scott, J. (1997). Acute and one-year outcome of a randomized controlled trial of brief cognitive therapy for major depressive disorder in primary care. *British Journal of Psychiatry*, *171*, 131-134.

Walker, H.M., Todis, B., Holmes, D., & Horton, G. (1988). The ACCESS program: Adolescent curriculum for communication and effective social skills. Austin, TX: PRO-ED.

Weisz, J. R., & Kazdin, A. E. (Eds.). (2010). Evidence based psychotherapies for children and adolescents (2nd .ed). New York, NY: Guilford Press.

Weisz, J. R., Thurber, C. A., Sweeney, L., Proffitt, V. D., & LeGagnoux, G. L. (1997). Brief treatment of mild-to-moderate child depression using Primary and Secondary Control Enhancement Training. *Journal of Consulting and Clinical Psychology*, 65, 703-707.

WHO department of non communicable disease surveillance (August 18th 2006) [Last accessed on 2007 Mar 20]. Available from: <a href="http://www.who.int">http://www.who.int</a>.

Wood, A., Harrington, R., & Moore, A. (1996). Controlled trial of a brief cognitive behavioural intervention in adolescent patients with depressive disorders. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *37*, 737-746.