

## THE APPLICATION OF COGNITIVE BEHAVIOUR THERAPY (CBT) FOR DEPRESSION: A CASE STUDY OF IRANIAN FEMALE

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### ABSTRACT

The study aims to examine the application of Cognitive Behaviour Therapy (CBT) for Depression among Iranian students. Depression is a factor leading to behavioural disorders that can happen to a person in an undesirable incident. To reduce the effect of depression, this study adopted a Cognitive Behaviour Therapy approach to a case of 32 year-old woman from Iran uses stress management and relaxation techniques. A clinical assessment showed that the woman had the highest level of depression among other depressed students. Counselling sessions, observations, and interviews provided qualitative data while Clinical Assessment of Depression Inventory yielded quantitative data relevant to the case. The analysis of the data revealed that the techniques of Cognitive Behaviour Therapy were effective in reducing the level of depression experienced by the client.

**Key Words:** Depression, Cognitive Behaviour Therapy (CBT), Stress.

### INTRODUCTION

Clinical depression affects mind, mood, body, and behaviour of an individual. A study in the United States showed that more than 17 million people- one out of ten adults- experienced depression each year, while almost two thirds of them apparently hardly receive help that they need. According to fall (2007) American College Health Association-National College Health Assessment, a national study, more than 3,200 university students were reported to be diagnosed as suffering from depression, with 39.2% of those students who were diagnosed during the past 12 months, 24.2% presently are under therapy for depression, and 35.8% are taking antidepressant medication in order to get cured. Among the students in a survey, 10.3% admitted "acutely thinking of committing suicide" in the past 12 months and 1.9% really practiced the act of suicide through that time. On the other hand, Abedini et al. (2007) studied the depression commonness amongst 190 nursing and medical students in the Hormozgan Medical University in Iran. They came up with the fact that depression commonness in nursing students was 60 percent, while in medical students was 49.5 percent. In a different study, which was done by Khoshkonesh et al. (2008) the relation between hopefulness, happiness and mental health amongst students was investigated. They discovered that there is a significant and negative relationship between feeling happy and mental problems, physical disorders, anxiety and depression of both male and female students. Prior to that study, Dadkhah et al. (2006) maintained that there was no significant difference between male and female students when considering mental disorders. Accordingly, Hossaini and Mousavi (2004) declared that 44.3 percent of the high school students in Iran experience depression. However, the aim

of this study is to investigate the level of depression among group members during the group counselling and to identify the use of management skill technique on client's stress in cognitive behaviour therapy (CBT) that can affect the level of depression during the individual therapy.

## LITERATURE REVIEW

Depression is a main issue that needs to receive a great deal of attention in order to create grounds to be prevented or cured. Students are the ones that make contributions to the development of society; therefore, it is of a great importance to have students who will later be healthy in their occupations. For example, Jafari (2011) examined the amount of happiness and its contributing factors amongst students in Isfahan University of Medical Sciences. He then, declared that 78 percent of students were benefiting from the high amount of happiness, and he claimed that the rests had a medium amount of happiness. It is interesting to note that in this study, cognitive and behavioural factors as well as self-disclosure were considered as the most effective factors in determining the students' level of happiness. In fact, according to Fall (2007) American College Health Association-National College Health Assessment, a national study of roughly 20,500 college students in 39 campuses showed that 43.2% of the students were reported as "emotion so depressed, it was hard to function" at least one time in their last 12 months. While being in Antarctica Ahmady et al. (2007), investigated organizational role stress amongst faculty members of medical schools in Iran and discovered that role stress being experienced relatively in higher degree by the faculty members. This assertion was in conformity with Sarason (1984) who said that test anxiety reduces the performance of those who experience it. To date, the CBT treatment of depression among students has been conducted by a number of researchers in different countries (Weiner, 1970). However, in the case of Iran, these types of treatment (CBT) have received very little attention and in-adequate care from the parts of the health personnel, hospital management and Iranian government. This resulted in the in-efficiency and ineffectiveness of the treatment. Exploring this issue is therefore very crucial in the life of depressed students of Iran.

In fact, Rhonda Woodcock (2006) stated that CBT has become an accepted and empirically validated therapeutic approach in psychotherapy for a number of different presenting concerns. Moreover, Yousefy et al. (2010)'s findings showed that CBT helps reduce hidden and manifest anxiety and improve the quality of life, as well as emotional, physical, and social function in patients with a cardiovascular disease. They also suggested that the methods of anxiety reduction and improvements of quality of life should be taught to coronary artery disease patients via cognitive behavioural therapy programs. Rafiee, Sohrabi, Shams, and Forough (2012) have claimed that a chronic pain is one of the most prevalent reasons of referral to health centres. CBT has therefore been considered an effective treatment for a chronic pain, to evaluate the efficacy of CBT in patients with a chronic musculoskeletal pain. These researchers also reported that psychological as well as medical treatment can be helpful to the patients with a chronic pain. In fact, Arani And Kakia (2013) defined depression as one of the most common psychological disorders. In recent years, cognitive-behavioural group therapy has also received much attention for depression treatment. Hamid et al. (2013) also proposed that CBT become an effective method employed to enhance coping strategies and symptoms among patients addicted to drugs. Pour (2014) then concluded that CBT can be used as an effective intervention method in women with high depression treatment.

## RESEARCH METHODOLOGY

Both quantitative and qualitative methods were used to collect data in this study. Pre-test and post-test questionnaires were used for the purposive sampling for a prospective client. A sample selection was applied on depressive patients who showed signs of depression from the results of the pre-test instruments, the CAD depression inventory. This qualitative research was using a single client. Therefore, a transcription of what has been discussed by the patient and the researcher, during the 10 sessions of counselling, was prepared to select the cases and determine data gathering and analysis techniques. The CAD is a 50-item self-report list which is to a high extent comprehensive, reliable, and sensitive to depressive symptomatology throughout the lifetime. It is approximately in the middle of signs of depression in children, adolescents, and adults—depressed mood

and anhedonia—as well as the further seven criteria for major depressive episodes which are listed in the DSM-IV-TR™.

Table 1: Study Design

Number	Pre-Test	Treatment	Post-Test
1 (Female)	O1	X	O2

Note: O1= pre-test      x= Treatment      O2= post-test

## FINDINGS

With regards to the research questions of the present study, the collected data were processed and analysed using both quantitative and qualitative analyses. In quantitative methodology the researcher applied pre-test and post-test. And in the qualitative study interview and observation were used. The first research question was answered based on the quantitative analysis on the clinical assessment of depression (CAD), whereas the second research question was answered through the qualitative analysis of the process and techniques of cognitive behavioural therapy (CBT). Furthermore the qualitative analysis of the counselling transcripts was used to answer the second research question.

### 1. Question :Is there any depression among group members during the group counselling?

Table 2: Level of Depression among Group Members

No	Gender	Name	Raw Score	T Score	%II	%90CI	Qualitative Classification
1	F	.....	119	69.25	91.5	60-69	Mild clinical risk (MCR)
2	F	.....	110	62	90	60-69	Mild clinical risk (MCR)
3	F	Sara	139	77	99	72-78	Significant clinical risk (SCR)
4	F	.....	135	75	99	72-78	Significant clinical risk (SCR)
5	M	.....	93	54	65	60-69	Mild clinical risk (MCR)
6	M	.....	108	61.5	85.25	60-69	Mild clinical risk (MCR)

Table 2: It shows that according to the clinical assessment of depression (CAD) the highest level of depression amongst members is demonstrated in student with the T score of 77%. And the lowest level of depression amongst the members is found in one of the males with the T score of 54%.

The counsellor formed a counselling group including 6 members to evaluate the members of the group and to identify the level of depression amongst them. In order to carry on the study, the counsellor used clinical assessment of depression (CAD) inventory. Applying clinical assessment of depression (CAD) test, the result showed that 4 members of the group were at the level of mild clinical risk of depression (MCR) and 2 members of the group were at the level of significant clinical risk (SCR) of depression, but Sara with the T score of 77 suggested the highest level of depression amongst the members.

### Question 2: Does the stress management technique successfully help the client's stress during the counselling sessions in cognitive behaviour therapy?

During the third session, it was found out that Sara worried a lot about herself and this is one of the causes of her depression. She talked about her experience of losing properties at airport when she first came; she lost her suitcase which consisted of her important belongings and properties, such as her money, her documents and other things. The client saddened about the loss of her job and her friends and it was expressed by her for many times during the counselling sessions. Another cause of her depression was the sadness she carried on. In addition to feeling so sad, she complained about her night dreams. She expressed that in her dreams, she was upset and alone amongst lots of people. She also mentioned that she had many nightmares and she is not relaxed during her sleeping times. She said "I always think a lot before sleeping". The client expressed that she worried about herself. To conclude, it can be noticed that her depression is caused by her sadness and the fact that she was a sad person led her to this situation. She mentioned that she lost her job and her friends and so many other possible things. As a result, it can be said that she worries about her future and some experiences

of these kinds. She, in fact, was feeling sad about herself because of many lacks; she lacked her job, friends and her boyfriend.

The first technique of cognitive behavioural therapy was applied by the counsellor to help the client to reduce her depression level. Stress management technique was amongst the techniques used by the counsellor. The counsellor showed some slide to the client to let her know that how stress can disturb her body and her emotions. The counsellor gave explanations about her homework related to the applied technique. In conclusion, it has been clarified that one of the causes of depression of the client was her worries about her future. Therefore, the given technique can help the client in the process of reducing her depression. During the fifth session, the client talked about her emotions. She expressed that she could not show her emotions to her friends. She, then, explained she missed many of possible, good situations just because she was not able to demonstrate her feelings. She lost her boyfriend and many of her other friends and she complained about her relationships with others. The client also expressed that she could not establish a balance within her relationships with her friends. She said that she was so serious because of some disciplines that she considers for herself. She mentioned that she did not like any relationships with others as she talked about such things for a long time.

### The Effectiveness of Counselling Techniques of CBT

How effective is the counselling techniques of cognitive behavioural therapy in reducing depression in the patient with depression?

Table 3: Results of Pre-Test taken by Sara

Scale	Raw score	T score	%II	90% CI	Qualitative classification
<b>Depressed Mood (DM)</b>	65	81	99	≥80	Very Significant Clinical Risk (VSCR)
<b>Anxiety /Worry(AW)</b>	31	70	97	70-79	Significant Clinical Risk (SCR)
<b>Diminished Interest(DI)</b>	19	80	99	≥80	Very Significant Clinical Risk (VSCR)
<b>Cognitive and Physical Fatigue(CPF)</b>	24	62	90	60-69	Mild Clinical Risk (MCR)
<b>Cad Total Scale (CAD)TS)</b>	139	77	99	70-79	Significant Clinical Risk (SCR)

Table 3: The level of depression of Sara according to the clinical assessment of depression (CAD), as it can be observed, the highest T score is the depressed mood (DM) with 81 and the lowest T score is devoted to the cognitive physical fatigue (CPF) with 62.

Table 4: The detailed Results of Post- Test taken by Sara

Scale	Raw Score	T Score	%II	90%CI	Qualitative Classification
<b>Depressed Mood(DM)</b>	30	45	39	<59	Normal Range(NR)
<b>Anxiety /Worry(AW)</b>	18	44	27	<59	Normal Range(NR)
<b>Diminished Interest(DI)</b>	12	56	73	53-56	Normal Range(NR)
<b>Cognitive and Physical Fatigue(CPF)</b>	18	49	45	≤59	Normal Range(NR)
<b>Cad Total Scale (CAD)</b>	78	47	41	≤59	Normal Range(NR)

Table 4: The level of depression of Sara according to the clinical assessment of depression (CAD) derived from the post test. Based on what is evident in table 3, and according to the scores of depressed mood (DM), anxiety/worry, diminished interest and cognitive physical fatigue (CPF), the level of depression is reduced to a favourable range "normal range".

Table 5: Result of Pre-Test & Post –Test

Total Scale (CAD)	Raw score	T-Score	%II	90% CI	Qualitative classification
Pre-test	139	77	99	70-79	Significant Clinical Risk (SCR)
Post-test	78	47	41	≤59	Normal Range(NR)

Table 5: demonstrates a significant difference between total score of the clinical assessment of depression (CAD) in pre-test and post- test. The scores are definitely calculated through clinical assessment of depression (CAD).

Finally, during the tenth session of counselling period, the counsellor applied the post -test for evaluating the level of depression of the client. The clinical assessment of depression (CAD) was used to determine the results which were previously given in table 3. It was evident that after ten sessions of counselling, the client showed that her emotions were all back to normal status. She explained that she had regained her interests to establish and keep relationships with her friends. The client expressed that she started to add vegetables and fruit into and remove sugar from her diet. One more interesting change in the activities of the client was she started to exercise and she made new friends. Furthermore, she said that she did not have nightmares anymore and this caused her to be relaxed while sleeping. At last but not least, she declared that she could stop her negative thinking which was a considerable positive change to help her to feel happy. It can be said that the three techniques of cognitive therapy; stress management technique, and relaxation technique affected the level of depression in this case study according to the given scores of the post -test in the session10 (Table 5).

## DISCUSSION

Level of depression among group members during the group counselling the findings of this study show that there is the highest level of depression among group members during the group counselling where the difference was demonstrated in students with the T score of 77% as highest and the level of depression of the other students within the group was a T score of 54% as low. Additionally, Abedini et al. (2007) studied the depression commonness amongst 190 nursing and medical students of the Hormozgan Medical University. They came up with the fact that depression commonness in nursing students was 60 percent while in medical students was 49.5 percent. Another study in which Beck's depression questionnaire was applied, it was mentioned that 34% of the respondents suffered from depression amongst 4020 high school students in Rasht, north of Iran (Modabber-Niaet al., 2006).

### Question3: How does stress management technique successfully help the client's stress during the counselling sessions in cognitive behaviour therapy?

#### Level of Depression before and after the Sessions

The client's level of depression was measured by the pre-test and post- tests for the clinical assessment of depression (CAD). The collected data showed that there was a reduction in the scores from the significant clinical risk of depression to a normal range. The detailed reductions in the scores are; the level of depressed mood (DM) from 81% to 45%, the level of anxiety/worry (AW) from 70% to 44%, the level of diminished interest (DI) from 80% to 56% and the level of cognitive and physical fatigue (CPF) from 62% to 49%. Overall, the total score of depression according to the clinical assessment of depression (CAD) suggests a reduction from 77% to 47%. It can be observed that the total level of depression after and before the counselling sessions is significantly different. In other words, the level of depression which had been experienced by the client of the present study did levelled down from the status of significant clinical risk (SCR) of depression to the normal range after the counselling sessions were successfully completed.

#### The Causes of Depression of the Client

The findings of this study demonstrated that many reasons could cause the client to be affected by depression. During the background sessions 2, 3, 4, 5, the client was given the opportunity to express herself in terms of thoughts, her emotions and her behaviours. In session 3, the cause of depression was detected to be the fact that she was worried about loss of her job, loss of her friends and loss of her boyfriend and a more recent loss

of her important belongings and properties such as; losing of a lot of money, her important documents and so many other things. She has also explained that she was sad and lonely. Later on, in session 4 she expressed that she worried about her negative thinking and that was a big problem for her. She described she was used to thinking a lot, she was used to thinking about something bad which might happen for her. In addition, she did not trust her abilities and capabilities in her life. The conversations between the counsellor and the patient during session 5 revealed that she worried about her relationships with her friends as she described she could not establish a balance between her emotions and her behaviours which might be the reason why she could not keep the relationships with her friends. All in all, she deeply felt sad about her relationships and her negative thinking.

#### The Effects of the Process and CBT Techniques

The techniques of the cognitive behavioural therapy were used in a flexible way in the process of helping the client to reduce the experienced depression. The counsellor had utilised the basic cognitive behavioural techniques to help the client to develop an insight to the causes of her depression. At first, the counsellor only applied fundamental counselling skills, such as active listening, minimal encouragement and paraphrasing. Active listening is the responsibility of the counsellor to take the content of the client's responses into account as well as taking notes of the implied meaning. The counsellor is supposed to pay attention to the accompanying gestures, emotions, hesitations and silences during the sessions of therapy. Consequently, applying the fundamental counselling skills aimed to build a reliable therapeutic relationship between the counsellor and the client so that the client felt valued and that she could express her feelings or whatever problem she was in the counselling session for. These fundamental skills prepared the grounds for the patient to feel secure and relaxed while talking about her problems. When the needed trust was established, the counsellor started to play more effective roles, letting the client recognize her unhelpful thoughts which had disturbed her life. A problem list was prepared in this step for the reason of creating the agenda to be used for future counselling sessions. The counsellor cooperated with the client to try to replace these dysfunctional and unhelpful thoughts with appropriate and logical ones, by demonstrating to the client how these thoughts had affected her life, and by teaching the client how to think again and differently.

#### The effectiveness of Cognitive Behaviour Therapy (CBT) in Reducing Depression of the Depressed Client

In general, this research had sufficiently verified that the CBT approach had helped to decrease depression level of the client of the present study. For the purpose of this study, the counsellor applied three techniques of cognitive behaviour therapy CBT; stress management and relaxation techniques. The techniques helped the counsellor to gain satisfactory outcomes. The client had also mentioned that she was satisfied with the counselling sessions. It should be mentioned that the client was given the time to talk about her thoughts and her behaviours. She participated all the sessions and was willing to do her homework and given practices between sessions. To sum up, the researcher discovered that the CBT approach was successful but the counsellor needed to develop her skills for the purpose of cognitive behaviour therapy.

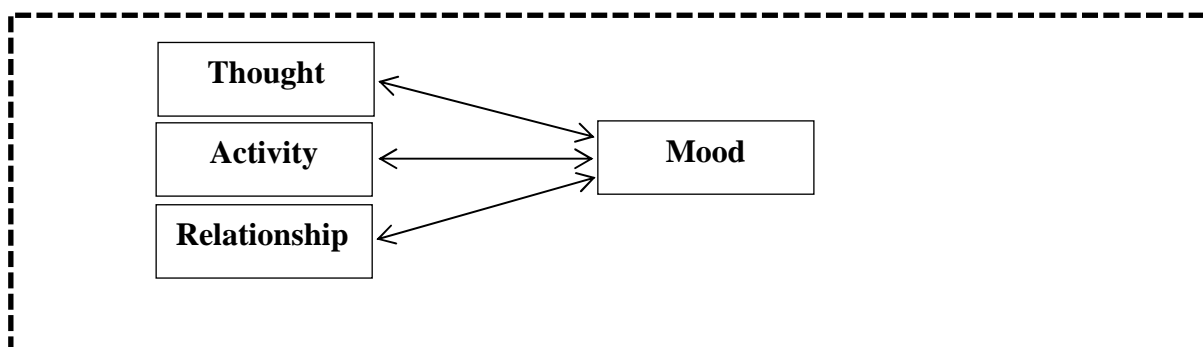


Figure 1: Basic Module of CBT

Figure 1 Connection between thoughts, feelings, physical symptoms and behaviour, Therefore by making a positive change in one of these areas, a positive change will be obtained in the total behaviour which will lead to well-being.

## CONCLUSIONS

In the current study, the pre-test of the clinical assessment of depression (CAD) was conducted to determine the level of depression of a group. It aims to select the subject of the study. A female client with the T score of 77 was recognized to be at the significant clinical risk of depression. The treatment for the clients over a 10-session period was then carried out to gain deep insights into the causes of depletion. One technique of CBT was therefore suggested. That is stress management applied to reduce the depression level of clients. The findings of this study demonstrated that CBT is an effective as the post test of CAD taken by the clients suggested a T score of 47 which is considered to be in a normal range. Therefore, it showed that CBT is an effective approach to reduce the depression level of the clients.

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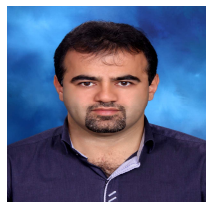
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