## **Original Article:** The Role of Cognitive Behavioral Therapy **@** in the Treatment of Anxiety Disorders

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#### A B S T R A C T

Social anxiety is a type of anxiety that occurs when facing social situations and communicating with others. People who suffer from social anxiety experience intense fear and worry in social situations and feel unable to manage and control these situations. Cognitive behavioral therapy is an evidence-based treatment for anxiety disorders. Due to various barriers, many people face difficulties in accessing treatment. Therefore, researchers have investigated the possibility of using the Internet to deliver CBT. It is important to ensure that the decision to promote such a treatment is based on high-quality evidence. Exposure therapy is a technique designed to help people cope with their fears. Using this method, the person is gradually exposed to stimuli that provoke a fear response in them. These triggers can range from external stimuli such as objects or social situations to internal factors such as thoughts, mental images, or physical sensations related to the trauma. When people are anxious because of a fear, phobia, or a traumatic memory, they often avoid anything that reminds them of it. This avoidance provides temporary relief, but ultimately maintains and reinforces the fear and avoidance pattern. In fact, avoidance can make things worse. Exposure therapy enables people to face and experience feared stimuli by creating a safe environment. This leads to a reduction in fear and anxiety, minimizing avoidance of feared situations, and improving quality of life. The ultimate goal is to desensitize people to the point where they can face their fears without experiencing intense anxiety. This therapy helps people overcome their fears and anxieties by breaking the fear and avoidance pattern. This technique is one of the most common techniques in cognitive-behavioral therapy (CBT).

## Introduction

ymptoms of social anxiety include the following:

**1- Fear of social inadequacy:** Individuals have an intense fear and worry about being

judged and criticized in social situations, or being rejected by others [1].

**2- Fear of social instability:** Individuals worry about being ineffective in social situations and appearing weak and incomplete in the eyes of others [2].

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**3- Fear of stubbornness and conflict:** Individuals fear being seen as a nuisance by others and causing conflict in social situations.

**4- Fear of public speaking:** Individuals experience intense fear and worry in situations where they have to speak in public and avoid these types of activities.

**5-** Fear of establishing and maintaining relationships: Individuals fear that they will fail to establish and maintain relationships with others and avoid these relationships [3].

## Social Anxiety Treatment with Cognitive Behavioral Therapy (CBT)

Cognitive-behavioral therapy (CBT) is based on the connection between thoughts, feelings, and behaviors. CBT treatment for social anxiety works as follows: In this method, it focuses on the connection between our thoughts and behaviors. CBT therapists use various techniques to help patients identify their negative thoughts and replace them with positive thoughts [4].

# Social Anxiety Treatment with Traditional Medicine

Some people and experts believe that herbal treatments should be used to treat diseases. Anxiety is no exception to this rule. In our traditional medicine, we try to solve a person's problems by relying on herbal medicines. Some of the herbal teas recommended in traditional medicine for reducing social anxiety are as follows:

- $\checkmark$  Thyme tea.
- ✓ Saffron tea.
- $\checkmark \quad \text{Mint tea.}$
- ✓ Lime tea.
- ✓ Ginger tea [5].

#### **Hypnosis Treatment for Social Anxiety**

Hypnosis is a psychological process in which a person's personality and mind are influenced. Hypnosis is performed directly through the hypnotist's commands and attention to the person's mind or through the focus and imagination of the person being affected. In this case, the person experiences changes in their awareness, concentration, and perception. This includes a change in the perception of time, a change in the perception of pain, a lack of self-control, and a change in the perception of memory. The person also becomes more susceptible to accepting the suggested changes and commands. Hypnosis can be used as a therapeutic method. For example, in the treatment of anxiety, fear, addiction, or chronic pain. Hypnosis is also used to improve performance in areas such as improving sleep, reducing stress, and increasing concentration. You should know that hypnosis requires the patient's cooperation, and the patient under hypnosis also has the right to control and make decisions about the hypnosis process to some extent [6].

## Treating Anxiety and Stress by Increasing Self-Confidence

Increasing self-confidence helps reduce stress and anxiety. When you have confidence in yourself, you experience a sense of strength, ability, and success, which reduces your anxiety and stress and helps you. Perform better in difficult situations. The following section provides some strategies for increasing selfconfidence:

**1- Practice and skills:** By practicing and improving your skills in different areas, your self-confidence will be strengthened. By learning and improving the skills you need, you will increase your feeling of strength and confidence [7].

**2- Experience successes:** Remind yourself of what successes you have had in the past. Think about situations that challenged you and you successfully overcame them. These reminders will give you more self-confidence and increase your level of confidence.

**3- Self-care:** Take care of yourself and your health. When you care about yourself and respond to your needs, you will feel good about yourself and your self-confidence will increase.

**4- Change your attitude:** Changing your negative attitude to a positive one can help your self-confidence. Instead of focusing on your weaknesses, focus on your strengths and abilities. Increase your self-confidence by practicing positive thinking and self-acceptance.

**5- Self-knowledge:** Know your strengths and weaknesses. Also focus on your abilities to increase your self-confidence [8].

### Treat stress and anxiety by reducing anger

Reducing anger leads to reducing stress and anxiety. Because anger and irritability are factors that increase stress and anxiety. Below are some strategies to reduce anger and, as a result, reduce stress and anxiety:

**1- Focus on breathing:** When you feel angry, take a deep breath and focus on your deep breathing to improve your feelings.

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**2- Exercise:** Exercise is an effective way to reduce anger and stress. With sports activities such as running, yoga, walking or breathing exercises, you can release your energy and experience a sense of calm and greater mental balance [9].

**3- Relaxation techniques:** Techniques such as meditation, concentration methods and relaxation exercises can help you reduce anger and stress and experience peace.

**4- Scheduling and having proper recreation:** Proper planning and time management can help reduce anger and stress. By planning and managing time, you can reduce excessive pressure and tension and deal with stressful situations more effectively and keep fatigue away by making time for rest and recreation.

**5- Social relationships:** Improving social relationships helps reduce anger and stress. By learning the right methods of communication and social behaviors, improve your interactions and reduce withdrawal reactions and reduce stress [10].

**6- Get enough sleep and rest:** Pay attention to getting enough sleep and rest. Because lack of sleep and rest increases anger and stress.

## Treating stress and anxiety with nature tourism

Nature tourism means traveling in nature and doing activities outside the urban environment. These activities include hiking in the forests, mountain climbing, camping, fishing, cycling and other naturerelated activities. Nature tourism can help reduce stress and anxiety for the following reasons:

**1- Connection with nature:** Being in a natural environment and seeing beautiful and relaxing landscapes will make you feel calm. This connection with nature can help you reduce stress and anxiety.

**2- Exercise and physical activity:** Nature tourism usually includes physical activities such as hiking, mountain climbing and cycling. Exercise and physical activity can directly reduce stress and release relaxing hormones like endorphins [11].

**3-** Focus and presence of mind: Being in nature and seeing its beauty helps you to get away from your mind and focus on the present and being in the moment. This focus and presence of mind can help reduce stress and anxiety.

**4- Reflection and tranquility:** Nature hiking is an opportunity for reflection and tranquility and helps you

to get away from negative thoughts. In nature, you achieve peace and tranquility that reduces stress [12].

**5- Disconnect from technology:** In nature, get away from your cell phone and other devices and have more contact with yourself and nature. This disconnection from technology helps you to reduce stress and anxiety.

## **Generalized Anxiety Disorder Treatment**

Generalized anxiety disorder is a chronic anxiety disorder that is accompanied by constant and unusual anxiety and stress. People with generalized anxiety disorder harbor irrational and unnecessary worries in their minds, and this anxiety is extremely harmful to their mood. Treatment for generalized anxiety disorder usually involves a combination of psychological methods and, if necessary, medication. Writing down worries and anxieties is an effective way to reduce generalized anxiety disorder. This activity helps you to understand your thoughts and worries clearly and systematically and to be more effective in managing them. Below are some steps for writing down worries and anxieties:

**1-** Create a suitable place to write: Choose a notebook or a note-taking software where you can record your worries and anxieties [13].

**2-** Choose a specific time to write down: It is helpful to set a specific time during the day to write down worries and anxieties. For example, do this activity late at night or before bed.

**3- Start writing:** Start writing down your worries and anxieties in short, concise sentences. State what you are worried about and how you feel.

**4- Describe in detail:** Explain what happened next that made you worry or anxious. Describe what specific events, thoughts, or facts make you feel bad.

**5- Positive and negative analysis:** Replace a negative analysis of an event with a positive analysis.

**6- Review and analysis:** Review your analysis of the phenomenon each time and, if possible, write it with a better perspective [14].

#### How to treat latent anxiety

Latent anxiety (Panic Disorder) is an anxiety disorder that is accompanied by sudden attacks of severe and uncontrollable anxiety. These anxiety attacks occur without previous symptoms and are accompanied by symptoms such as shortness of breath, palpitations, chest pain, sweating, shaking, dizziness, and a feeling of impending death and lack of control over the body. These attacks occur within a few minutes and may be repeated. Hidden anxiety has a great impact on a person's quality of life and causes avoidance of certain places or situations [15].

This problem begins during puberty and continues chronically. Hidden anxiety is associated with a combination of genetic, chemical and psychological factors. Environmental factors such as stress, unpleasant experiences and family history also play an important role in the development of this disorder. Psychological counseling, cognitive-behavioral psychology (CBT), breathing exercises and stress management skills can help reduce and manage anxiety attacks. In some cases, your doctor may prescribe antianxiety or antidepressant medications to control symptoms.

### Treatment of separation anxiety in children

Separation anxiety in children is an anxiety disorder that occurs in childhood. This disorder usually begins in preschool or elementary school and continues until adolescence. In this disorder, a child who has not yet been separated from his parents or those around him is worried and afraid of being separated from them.

The causes of separation anxiety in children include genetic, chemical, and environmental factors. A frightening experience such as sudden separation from parents, environmental changes, unpleasant experiences, or tragic events also play an important role in the occurrence of this disorder. Treatment of separation anxiety in children is usually done with the help of psychological methods [16].

Of course, sometimes and if necessary, medication is also used for treatment. Psychological and behavioral counseling therapy (CBT) can help the child to cope with his fear and worry about separation from parents and learn anxiety management skills. Family counseling and parental participation in the treatment process are also important.

### Method of treating anxiety with meditation

Meditation in nature or in a group will be a unique experience that, in addition to physical health, also helps mental health and reduces anxiety. The following are explanations about both methods:

**1- Meditation in nature:** Meditation in nature allows you to enjoy peace by being in a natural environment. By sitting in nature, you can pay attention to the sounds, smells, and beautiful sights of nature and be in the

present moment. Also, think about the peace that nature gives you and stay away from the worries of life. For example, you can sit on the ground and listen to the sound of the river or the wind rustling through the leaves of the trees and focus on your breath, using nature as a place for relaxation [17].

**2- Group meditation:** Group meditation consists of shared energy and group support. By participating in a meditation group, you are present with others in a common goal for peace and inner growth. This connection strengthens the feeling of strength and support and makes the meditation experience more interesting for you. Also, in the group, you can benefit from the experiences and perspectives of others and gain more peace by participating in meditation exercises.

## Psychological methods in the treatment of anxiety

Psychological methods are one of the effective methods in treating anxiety. These methods operate based on the assumptions and principles of psychology and accelerate the improvement of anxiety by changing the beliefs, thoughts and behaviors of the individual in the face of anxiety. Below we will mention some psychological methods in treating anxiety:

**1-Behavioral Therapy:** In this method, the individual is encouraged to change his/her reaction by changing his/her behaviors when facing anxiety-provoking situations. This method includes techniques such as breathing exercises and positive thinking exercises.

**2- Cognitive Therapy:** In this method, changes are made in the individual's negative beliefs and thoughts about himself/herself, others and the world. With the help of positive stimulation exercises, the individual changes his/her negative beliefs and thoughts and accelerates the improvement of his/her anxiety [18].

**3-** Cognitive-Behavioral Therapy (CBT): This method is a combination of behavioral change and belief change methods. By changing their behaviors as well as negative beliefs and thoughts, the person experiences significant improvement in their anxiety.

**4- Dream Analysis:** In this method, dreams and the symbols in them are used for examination and analysis. This method helps the person to reach a deeper understanding of the cause of their anxiety and find solutions to manage it.

**5-** Critical Analysis: In this method, the person evaluates their thoughts and beliefs with the help of a

psychologist and analyzes them logically and correctly. This method helps the person to give up their negative and incorrect thoughts.

**6- Mindfulness:** This method is based on focusing the mind on the present moment. By practicing mental focus and awareness of emotions and experiences, a person reduces their anxiety and reaches a more relaxed and balanced state [19].

7- Self-Help Techniques: These exercises include techniques such as breathing exercises, relaxation exercises, imagery exercises, and stress management techniques that help a person reduce their anxiety and improve their mental state.

8- **Problem-Solving Therapy:** In this method, a person, with the help of a psychologist, identifies their problems and issues and seeks effective solutions for them. This method helps the person reduce their anxiety by managing their issues and problems.

**9- Exercise Therapy:** Physical exercises and mobility help the person reduce their anxiety. Activities such as walking, cycling, swimming, and yoga are effective in improving their mental state and reducing anxiety [20].

### **Music as a Treatment for Anxiety**

Music as a complementary therapy has significant positive effects in reducing anxiety. Classical and relaxing styles in particular are very effective in this regard. Below, we will examine a number of the positive effects of music on reducing anxiety:

**1- Relaxation:** Classical and relaxing music are accompanied by calm and gentle sound patterns that create a state of relaxation in listeners and subsequently reduce the level of stress and anxiety in the body.

**2-Nervous relief:** Classical and relaxing music soothes the nerves. The gentle and harmonious sounds and patterns of music act as a type of therapeutic stimulation for the nervous system and help reduce anger and anxiety.

**3-** Concentration and mental exercise: Listening to classical and relaxing music helps a person improve their concentration and facilitate mental exercise. These exercises can help a person get away from their own mind and achieve greater peace [21].

## Using Creative Imagery Techniques to Treat Anxiety

You can reduce negative emotions through mental imagery and replace them with positive and calming

images. Below, we will examine some creative imagery techniques for treating anxiety:

**1- Spatial imagery:** In this technique, a person creates images of relaxing places or situations in their mind. For example, they imagine the image of a relaxing beach with the sound of sea waves. These images help reduce stress and anxiety.

**2- Color imagery:** In this technique, you associate each color with a specific state in your mind. For example, you can associate the color blue with calmness and imagine the image of a relaxing blue lake. By regularly practicing color imagery, you can actively strengthen feelings of calm in yourself [22].

**3- Story imagery:** In this technique, a person creates a relaxing and positive story in their mind. You can creatively imagine a fictional story that includes calming elements such as nature, animals, or beloved people. These fictional images help the person escape from the current anxiety and instead move into a positive and calming world.

**4- Creative imagery using music:** In this technique, play relaxing music and imagine images of the sounds and patterns of music in your mind. You can imagine an image of yourself in a relaxing place with music. This technique helps a person to relax and reduce anxiety.

# Herbal supplements are the best way to treat anxiety

Using herbal supplements is one of the ways to treat anxiety. Some herbal supplements used to treat anxiety include:

**1- Aloe vera:** Aloe vera has relaxing and anti-anxiety properties and helps reduce tension and stress.

**2- Relaxing herbs:** Some herbs such as iris, thyme tea and lavender have relaxing properties and are useful in reducing anxiety.

**3- Anti-anxiety oils:** Oils such as peppermint oil, lavender oil and coconut oil have anti-anxiety properties and help reduce anxiety.

**4- Herbal extracts:** Some herbs such as thyme and saffron have calming properties and can be effective in reducing anxiety [23].

## The effect of technology and the use of mobile applications in reducing anxiety

Technology and the use of mobile applications can have a positive effect on reducing anxiety. Below we

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examine the important effects that technology and mobile applications have on reducing anxiety:

1- **Providing information and training:** Mobile applications provide users with information and training related to anxiety management, breathing exercises, and relaxation methods. This information helps users to better understand their anxiety and find effective ways to deal with anxiety.

**2- Relaxation and meditation exercises:** Mobile applications teach users relaxation and meditation exercises. These exercises help reduce stress and anxiety and help the audience regain their peace of mind [24].

**3-** Focus adjustment and breathing exercises: Some mobile apps help users improve their focus. These exercises help reduce anxiety and help users better cope with their daily stress and pressures.

**4- Anxiety recognition and management:** Some mobile apps, such as Sanvello and Calm, have the ability to analyze the situation and manage anxiety. These apps can help users examine their anxiety process and find effective ways to manage it.

**5- Motivation:** There are apps that motivate users with positive clips and sentences. These apps include motivational messages, reminders, and daily exercises that help users continue to manage anxiety as an ongoing process [25].

### **Misconceptions about anxiety**

In this section, we will examine the misconceptions about anxiety:

1- Only genetic factors are the cause of anxiety: The influence of genetics on the occurrence of anxiety disorders is real and this is a correct belief, but the misconception that exists is that only genetic predisposition is the main cause of anxiety disorders. In fact, anxiety disorders are caused by a combination of genetic, environmental and personality factors. Genetics plays an important role in anxiety disorders. Because some people are naturally more vulnerable to stress and anxiety, but genetics alone is not enough and environmental factors also play a significant role in the occurrence of anxiety disorders. For example, a frightening experience, an inappropriate family environment, a bitter past experience, etc. are environmental factors that contribute to the occurrence of anxiety disorders.

**2- Anxiety disorder is permanent:** Anxiety disorders can be controlled and cured with appropriate treatment and professional counseling. Although this disorder

may be chronic and require ongoing management, it is not the case that you have to live with it forever [26].

**3- Anxiety disorder is not completely curable:** Anxiety disorder can be completely cured in many cases and people with this disorder can recover. It is a misconception that anxiety disorder is not completely curable. Various treatment methods such as psychotherapy, stress management, behavioral interventions, relaxation exercises and breathing exercises, and if necessary, medications can reduce and control anxiety disorder.

## Anxiety treatment method with exposure therapy

Exposure therapy is an effective method in treating anxiety disorders. In this method, the person gradually faces situations or factors that cause anxiety under the supervision of a psychologist or psychiatrist. The main goal of exposure therapy is to reduce and control fear and anxiety.

This method helps the person to face the most frightening situations or factors that trigger anxiety and gradually learn to tolerate them. This exposure is done in the form of persuasive imagery, direct therapy or experimentally in a real situation. Exposure therapy works on the principle of social adaptation, meaning that by repeatedly and persuasively exposing a person to a feared situation, they gradually normalize it and reduce their fear and anxiety response. This method is also used in conjunction with teaching stress management and relaxation techniques. In general, exposure therapy is very effective and recommended for treating anxiety disorders such as agoraphobia, agoraphobia, insect phobia, etc [27].

## Treating Anxiety with Dialectical Behavior Therapy

Dialectical Behavior Therapy is an evidence-based treatment method used to treat mental disorders such as borderline personality disorder. This method was first developed by Marsha Linehan in the 1980s. DBT operates on two main principles: dialectics and behavioral therapy. Dialectical means integrating two opposing concepts. In this method, the specialist tries to teach the patient acceptance and change, attention to self and others, and recognition of emotions and the use of strategies to manage them. Behavior therapy in DBT includes four main skills: **1- Awareness:** Learning skills of awareness of oneself, emotions, environment, and current experiences.

**2- Tolerance:** Increasing pain tolerance and reducing inappropriate reactions.

**3- Emotion regulation:** Learning effective strategies for managing intense emotions.

**4- Insight skills:** Improving inappropriate thoughts and beliefs and choosing healthy solutions to face problems and threats.

DBT uses a combination of individual and group sessions, individual problem-solving, interpersonal communication, and home exercises to help a person change inappropriate behaviors and improve their quality of life [28].

## Commitment and acceptance-based therapy

Suppose you are facing social anxiety and are always stressed and worried about participating in large groups and meeting others. Commitment and acceptancebased therapy helps you to face this anxiety and continue living your life according to your values and goals. One of the skills you learn in this type of therapy is awareness. Here, the specialist teaches you to pay attention to your current experiences consciously and without interfering with evaluations and mental stories. For example, in a therapy session, you might pay attention to your breathing and focus on how you are feeling in the moment. This therapy encourages you to tolerate your emotions.

Instead of trying to reduce or fight your anxiety, you learn to accept and be in touch with your emotions. In a therapy session, you might be advised to attend a social situation, such as a party. In this situation, you will likely experience intense anxiety, but here you are advised to accept this anxiety and deal with it instead of avoiding the situation. In this situation, you will find that your anxiety naturally decreases and your social relationships improve.

In addition to being aware of and tolerating your emotions, acceptance-based therapy encourages you to identify personal values and goals. You work with your therapist to identify the values and goals that you believe are meaningful for your life. You then commit to taking actions in your life that are consistent with these values and goals. This includes confronting fears and anxiety, taking risks in social situations [29].

## Art Therapy as a Treatment for Anxiety

Art therapy is a treatment that uses creative and artistic approaches to facilitate the processing and expression of feelings, experiences, and thoughts. This method is based on the idea that there is a connection between creativity and psychological improvement, and that through art and creativity, your anxiety is reduced. Art therapy can be applied to various types of art, such as painting, music, playing an instrument, dramatization, and crafts. The art therapist, who is usually an artist and a therapist, guides the person in an artistic activity and allows them to express their experiences, feelings, and thoughts creatively without using words and without directly communicating them to the therapist. Art therapy helps reduce anxiety in several ways:

**1- Nonverbal expression:** Many people do not express their problems and feelings fully and accurately through words. Art therapy allows them to express their experiences and feelings nonverbally through art.

**2- Stress management skills:** Artistic activities such as painting and dramatization help the individual discover and utilize the best stress management strategies [30].

#### **Getting Rid of Anxiety with Family Therapy**

Family therapy is a treatment method based on the idea that the family is an important unit in people's lives and that changes in family relationships help improve mental health and reduce anxiety. In this treatment method, the focus is on relationships and communication patterns in the family, and family members participate in the treatment process. Family therapy helps reduce anxiety in several ways:

**1- Improving relationships:** In family therapy, family members communicate with each other and focus on their relationships. This method helps them identify inappropriate communication patterns and improve and strengthen their relationships. Healthy and strong relationships in the family help reduce anxiety and increase support and trust between family members.

2- Changing behavioral patterns: Family therapy helps family members identify inappropriate behavioral patterns and change them to healthier and more effective patterns. These changes include strengthening communication skills, managing anger and tension, problem solving and joint decisionmaking.

**3- Changing the family structure:** In some cases, the family structure plays an important role in causing

anxiety. Family therapy helps family members examine their family structure and make the necessary adjustments. For example, modifying roles and responsibilities, creating healthy boundaries and appropriate distribution of power in the family [31].

## **Psychoanalytic therapy**

In this method, the focus is on examining and deeply understanding the person's unconscious thoughts, feelings and relationships. The goal of psychoanalytic therapy is to better understand and understand themselves and the factors that lead to anxiety and to make positive changes in life and relationships. Psychoanalytic therapy helps reduce anxiety in several ways:

1- Recognizing and understanding unconscious feelings and thoughts: Psychoanalytic therapy helps the person to understand their unconscious feelings and thoughts more deeply. This understanding helps to identify and change inappropriate behavioral patterns and relationships that lead to anxiety [32].

**2- Analysis of unconscious relationships and patterns:** Psychoanalytic therapy analyzes unconscious relationships and patterns. This analysis helps to become aware of them and, if necessary, make changes in your relationships. In a way that your unconscious is not damaged and thus helps to reduce anxiety and improve relationships.

**3- Attention to past experiences:** With this method, past experiences are addressed and used to better understand yourself and inappropriate and harmful patterns.

### **Discussion**

## Virtual Reality Exposure (VRE)

This therapy uses virtual reality technology to simulate things, situations, or activities that the person is afraid of. Especially for situations where real exposure is not practical. Such as fear of flying, which can be done using a flight simulator, and the actual experience of flying is practically impossible [33].

## **Exposure therapy techniques**

**1- Graded exposure:** In this method, the person gradually faces their fear. In this way, the therapist asks the person to list their feared objects, activities, and situations in order of severity. Then the person starts with mild exposure and, with the help of the therapist, progresses to more difficult cases over time.

For example, if a person is afraid of flying by plane, in the first stage they are faced with a photo of it, then they watch a video of it, in the next stage they imagine the plane flying. After that, they imagine themselves flying by plane and proceed in the same way, until finally the person can board the plane without irrational fear [34]. 2- Immersion: This method is similar to graded exposure, but with the difference that it starts with the most difficult and intense exposure first. This process usually involves teaching clients some relaxation techniques and then suddenly and directly exposing them to the feared stimulus. Although the person may overcome their fear more quickly in this case, the exposure is usually so difficult that they often avoid it at the beginning of treatment, but after some time has passed and the intensity of anxiety has decreased, it is possible to do it.

**3- Prolonged exposure therapy:** This approach involves gradually approaching memories, feelings, and situations related to the trauma. It usually takes about three months with weekly individual sessions, and therefore requires 8 to 15 sessions. Therapists often use this approach for people with PTSD.

**4- Systematic desensitization:** This approach also involves exposing the person to the feared stimulus step by step. In this method, exposure therapy activities are combined with relaxation exercises, guided imagery, or breathing exercises. This method can help the person to have more controllable exposure experiences. It also helps the person to associate their fears with positive and relaxing activities. Of course, it progresses more slowly than graded exposure and therefore requires more time [35].

**5- Exposure and response prevention (ERP):** In this therapy technique, the person is exposed to the feared stimulus, but does not display that usual response. People usually display behavior in the face of unpleasant stimuli that reduces the intensity of their anxiety. For example, they escape or avoid the situation, but in this method the person must try to resist anxious thoughts. Research has shown that this technique has been useful in treating obsessive-compulsive disorder (OCD). Preventing mental compulsions and obsessive behaviors can create insight, so that people with this disorder learn that if they do not act on their obsessive thoughts, nothing bad will happen.

# What disorders is exposure therapy effective in treating?

Exposure therapy is commonly used to treat anxiety disorders. Because these are disorders that are usually very fearful to overcome. Some of these anxiety disorders include: generalized anxiety disorder (GAD), post-traumatic stress disorder (PTSD), various phobias, panic disorder, obsessive-compulsive disorder (OCD), social anxiety disorder, and chronic stress disorder.

## **Cognitive restructuring**

Cognitive restructuring replaces unhelpful thoughts with healthy, balanced thoughts. Most people experience negative thoughts from time to time, but sometimes these patterns interfere with relationships, work, and even daily life. Cognitive restructuring is a group of therapeutic techniques that help people identify and change negative thought patterns. The goal of cognitive restructuring is not to make a person think positively, but to encourage balanced, realistic thinking. Cognitive restructuring involves slowly replacing one belief with another that is more accurate or helpful. For example, instead of thinking that no one will like you if you show your true self, you might come to believe that some people might like you. While others may think differently, and that's okay. Cognitive restructuring gives people the opportunity to recognize their own maladaptive thoughts as they occur and then use various techniques to transform these thoughts into more accurate and helpful thoughts. The idea behind this theory is that if you can change the way you look at events or situations, you can also change your feelings and behavior. One of the benefits of using cognitive restructuring is "emotional regulation." Many people have negative thoughts when they experience a certain emotion. For example, when someone feels sad, they may automatically think, "I'm a failure." This negative thought can intensify their sadness. In this situation, the psychotherapist can help the client identify these negative thoughts and correct them with a more positive and realistic view. Instead of thinking, "I am a failure," the client can define their thinking as: "I am struggling right now and that does not make me a failure."

### **Cognitive Distortions**

Our way of thinking can deceive us in various ways, even when we think we are very logical. These deceptions are known in psychology as "cognitive distortions." Cognitive distortions are inaccurate or biased ways of thinking about ourselves or our surroundings. They are irrational or incorrect beliefs and thought patterns that have the potential to seriously damage our feelings, self-confidence, and ability to succeed. These thought patterns create a distorted view of reality and can lead to depression, anxiety, relationship problems, and self-destructive behaviors.

## **Cognitive Restructuring Techniques**

Fortunately, although cognitive distortions can seem like stubborn thought patterns, there are ways to combat them. Cognitive restructuring techniques have been very successful in identifying, challenging, and replacing faulty ways of thinking with more accurate, useful, and positive ways of thinking. Let's now examine each of the cognitive restructuring techniques. **1- Socratic Dialogue:** The Socratic method involves asking a series of questions until the person either gives an incorrect answer or proves that they have a perfectly sound argument. This can be a useful technique for interrogating thoughts. Thoughts often pass through the mind so quickly that it is difficult to notice their presence and their powerful impact.

**2- Thought Journaling:** Writing down your thoughts is a great way to become aware of any cognitive distortions that you may not have noticed before, and it is an essential first step in restructuring them. The main idea is for the person to identify repetitive thoughts and record the situation that caused them along with the thought itself.

In the worksheets that are available for recording thoughts, the person's feelings at that moment are also recorded. The person's awareness of destructive thoughts and the number of times they occur is a big step towards changing or replacing them with healthy and helpful thoughts. In fact, one of the main tasks of the therapist is to identify the client's thought patterns and challenge them. The thought recording technique is an essential part of cognitive-behavioral therapy and gives the person the opportunity to monitor their thoughts. For this reason, it is also widely used in the "self-monitoring" technique that we will discuss later.

## **Relaxation and stress reduction techniques**

One of the techniques used in cognitive-behavioral therapy and useful for reducing stress and relaxation is meditation. This technique is usually used alongside other methods to facilitate the treatment process and coping with the stresses that arise. Because apart from the stresses that the person is dealing with, parts of the treatment process that include facing fears and anxieties may also be stressful for the person. As a result, various stress reduction techniques can be helpful. Of course, it is clear that the continuous and consistent use of these techniques can be effective. Here we mention four different and very useful techniques. They can also be used individually or in combination [36].

**1-Deep breathing technique:** This technique involves consciously deep breathing through the nose, transferring oxygen to the abdomen, and exhaling through the mouth. Focusing on breathing and moving oxygen to the brain helps reduce anxiety and stress, regulate emotions, increase mindfulness, and improve cognitive function.

2- Progressive Muscle Relaxation Meditation: Progressive Muscle Relaxation (PMR) is a type of therapy that involves tensing and relaxing your muscles, one by one, in a specific pattern. The goal is to release tension from your muscles while gradually becoming aware of the tension in your body. When practiced regularly, this technique has beneficial effects on the mind and body. Effects include reduced anxiety and stress, high blood pressure, migraines, improved sleep, and reduced neck and back pain [37].

**3- Mindfulness Meditation:** Mindfulness is one of the most popular meditation techniques and has two main parts: attention and acceptance. The attention part involves focusing on what is happening in the present moment, which usually involves directing your awareness to the thoughts, physical sensations, and emotions that you are experiencing. The acceptance part involves observing those feelings and emotions without judgment. Essentially, the goal of paying attention is to observe what is happening in the moment, without responding to or changing them. Research has shown that mindfulness meditation helps reduce anxiety and stress, pain, symptoms of depression, and addiction.

**4- Visualization Meditation:** Visualization meditation or guided imagery is a relaxation technique that focuses on mental images, such as walking on the beach or in a meadow. This technique is similar to a controlled daydream and helps the mind to turn off stressful thoughts and reduce tension in the body. Guided imagery is a way to manage your stress. It is a relaxation technique that involves visualizing positive and calm environments.

In guided imagery, a person intentionally thinks of a relaxing place or scenario. The goal is to create a calm

state in the body through relaxation and mindfulness. Because according to the principles of cognitivebehavioral therapy, our bodies respond to our thoughts. Visualization meditation reduces anxiety and stress, reduces pain, improves sleep, and also reduces symptoms of depression.

### Self-monitoring

The term self-monitoring is used to describe the regular recording of behavior by clients. Self-monitoring is appropriate for recording overt behaviors, such as the number of alcoholic drinks consumed per day or the number of self-harming behaviors. It can also be used to monitor and record internal emotional states, such as levels of depression, anxiety, suicidal thoughts, or other dysfunctional coping strategies. In addition, clients can use this technique to record self-management behaviors. For example, one essential treatment strategy in cognitive-behavioral therapy for panic disorder is the use of exposure. Clients are exposed to anxiety-provoking stimuli during therapy sessions. They are also asked to be exposed to these stimuli outside of the session and record their experiences of this exposure. Self-monitoring provides information to the therapist and helps him or her understand how the client's problems developed. What is perpetuating these problems and why they have not been resolved. In fact, with the help of self-monitoring, the therapist and the client reach a common understanding of the problem. When self-monitoring is done effectively, it becomes a powerful springboard for many parts of the therapeutic process. In general, self-monitoring is divided into two parts:

 Differentiation: In this part, the client, with the help of the therapist, identifies and selects the thought, feeling, or behavior that he or she wants to examine. This part can be challenging for clients. Because it may be the first time they have paid attention to their symptoms, thoughts, and feelings. To simplify this challenge, the therapist can first ask the client to record their overt behaviors and then move on to more complex inner behaviors such as thoughts and feelings.
Recording: This part involves recording and documenting behaviors. In fact, by writing down behaviors, it is possible to analyze, examine, and track them. Using this method allows the individual and the therapist to monitor behaviors, that is, to distinguish the goal, record it, and then review it [38].

## **Activity Planning and Behavioral Activation**

Action planning, designed to develop behavioral activation, is a CBT technique that helps you reactivate behaviors that you would normally avoid due to depression, anxiety, or other barriers. By identifying and planning helpful behaviors, you increase the likelihood of performing them. This technique is especially useful for people who have difficulty completing tasks due to lack of motivation or due to procrastination and poor time management. Activity planning can be effective in creating helpful habits. It provides a good opportunity to put what you have learned into practice. Some people know helpful behaviors and are aware of their good results, but due to problems such as depression or anxiety, they do not have the ability and motivation to perform those activities, or they may even refrain from performing them because they do not know how to perform a behavior. However, using such a technique makes the path to implementing a behavior smoother [39].

## **Problem Solving**

Problem solving is one of the most common and practical skills used in cognitive-behavioral therapy for treating depression and anxiety disorders. Problemsolving training involves learning and practicing five sequential steps: identifying a problem, making a list of possible solutions, assessing the strengths and weaknesses of each solution, selecting the appropriate solution to implement, and finally implementing the solution and determining whether the problem was solved or if another solution is needed to solve the problem. Problem solving is one of the techniques used in the behavioral aspect of cognitive-behavioral therapy. Cognitive-behavioral therapy goes beyond challenging negative, automatic thoughts. The behavioral part of this therapy focuses on the things people do and how to change them to support their mental health [40].

## **Attention Redirection**

In this technique, the person learns not to pay attention to negative thoughts and feelings, or in other words, to distract themselves from them. Research has shown that using this technique reduces the amount of negative thoughts in people with depression. Just as rumination increases these thoughts, distraction or attention-redirection techniques can prevent them from spreading and reduce them over time. Distraction is an emotion regulation strategy that, especially when combined with acceptance, is twice as effective as when combined with avoidance behaviors. In fact, accepting the emotions and feelings that are going on inside us helps to take control and naturally reduce them [41].

## Cognitive Behavioral Therapy (CBT) Techniques for Treating Disorders

Some cognitive behavioral therapy (CBT) techniques are more effective in treating some disorders. In order to summarize, we have tried to provide a clear classification of the use of these techniques in this section:

## A) CBT techniques for treating depression:

1- Cognitive restructuring: Cognitive restructuring helps to identify and challenge negative thought patterns in depressed people. These thoughts often include themes of worthlessness or hopelessness, and CBT helps replace these thoughts with more realistic and balanced ones.

**2- Self-monitoring:** Recording information in a chart helps people track their feelings, thoughts, and behaviors over time. By identifying patterns, clients and psychotherapists can gain a better understanding of the triggers of depression and offer strategies for dealing with them more effectively.

**3- Sequential or sequential approach:** People with depression may fear doing daily activities or achieving big goals. Using sequential approach, these goals are broken down into small, achievable steps. For example, if a person wants to get back into social activities, they could start with a short phone call to a friend and then gradually move on to larger gatherings.

**4- Activity Planning and Behavioral Activation:** This technique encourages the person to engage in activities that they previously found enjoyable or meaningful. This helps break the cycle of passivity and negative thoughts, which leads to improved mood and reduced symptoms of depression.

**5- Problem Solving:** CBT also teaches people practical problem-solving skills so they can effectively deal with everyday challenges. By developing a structured approach to solving problems, people feel more in control, which can help reduce symptoms of depression.

**6- Attention Redirection:** The first step in this technique is to identify intrusive or repetitive thoughts that are causing or exacerbating depression. The person

then needs to choose an activity or topic that can distract them from negative thoughts. These activities can include exercising, reading a book, talking to friends, or even doing a mindfulness exercise. The person should try to focus their attention completely on the chosen activity or topic. This may be difficult at first, but with practice it can become easier.

#### **B)** CBT techniques for treating anxiety:

**1- Cognitive restructuring:** This technique involves identifying and challenging irrational thoughts that lead to anxiety. By identifying these cognitive distortions, people learn how to reframe their thoughts so that their anxiety is reduced [42].

**2- Exposure therapy:** Gradual exposure to fearful situations or objects in a controlled manner helps reduce fear and anxiety. This technique is very effective in social anxiety disorder and panic disorder. For example, a person with social anxiety may first imagine that they are in a social situation and gradually move towards actually experiencing these situations.

**3- Self-monitoring:** People with anxiety disorders often have automatic negative thoughts that lead to increased anxiety. Using the self-monitoring technique, the person can identify and challenge these thought patterns. In such situations, the psychotherapist can provide the client with a self-monitoring form and ask him to record his thoughts, feelings, or behaviors in it, so that they can identify negative patterns and find more effective coping strategies [43-45].

**4- Relaxation and stress reduction techniques:** Methods such as deep breathing, progressive muscle relaxation, and mindfulness exercises are used to manage physical symptoms of anxiety, such as heart palpitations and muscle tension [46].

**5- Role-playing:** Many people with anxiety disorders, especially social anxiety, are afraid of facing others and social situations. Role-playing helps them practice their communication and social skills and reduce this fear.

**6- Mindfulness:** People with anxiety disorders are often preoccupied with constant worries and worrying thoughts. Mindfulness helps them to examine these thoughts in an observational manner and allow them to pass through their minds without getting involved in them. This leads to a reduction in the intensity of anxiety and worries. Mindfulness also helps people to better manage their emotions and respond to them with awareness and decision-making instead of quick and automatic reactions [47-49].

**7- Behavioral experiments:** People with anxiety may have irrational and negative beliefs that lead to increased anxiety. In behavioral experiments, the person tests these beliefs in real situations and compares the results with initial predictions. This process makes the person realize that many of these beliefs are incorrect or exaggerated. Behavioral experiments also help reduce the avoidance of anxiety-provoking situations. Because by observing the actual results, the person realizes that these situations are not as scary as they thought [50-52].

**8- Planning activities and behavioral activation:** People with anxiety usually avoid situations and activities that are anxiety-provoking. This avoidance can increase anxiety over time. Behavioral activation helps people gradually engage in positive and rewarding activities instead of avoiding them, thereby reducing anxiety. Many of the suggested activities in behavioral activation include social interactions, which can help reduce social anxiety and improve interpersonal relationships [53-55].

**9- Problem Solving:** People with anxiety often have scattered and worrying thoughts. Problem-solving techniques help them organize these thoughts and solve problems step by step. When a person uses problem-solving techniques to find practical solutions, their feelings of helplessness decrease and they gain more confidence to face future problems [55].

## Conclusion

Research has shown that cognitive-behavioral therapy (CBT) is an effective treatment for common mental disorders that are mild to moderate in severity. Effective and easy-to-use cognitive-behavioral therapy helps therapists to treat clients in a simple, structured, and timed manner. It also identifies the need for further treatment or referral, thus expanding access to CBT services. The main therapeutic target in CBT is cognitions, and the cognitive theory of emotional disorders holds that cognitions play a central role in the development and maintenance of emotional disorders. Furthermore, according to cognitive theory, different disorders have different cognitive contents. For example, in depression, the individual views his or her personal world negatively, while the anxious person views his or her personal world as dangerous. The different cognitive structures of the disorders lead to different treatment protocols. There are two different types of anxiety states. In the first type, the dominant issue is panic attacks. These attacks may be unexpected

and occur in almost any situation. A panic attack is an intense feeling of terror or impending doom that begins suddenly and is accompanied by a wide range of physical discomfort. These discomforts include: shortness of breath, palpitations, feeling of suffocation, dizziness, hot and cold sensations, tremors and a feeling of unreality. The unexpected and intense nature of these sensations makes patients think that they are at risk of a physical or psychological catastrophe such as fainting, heart attack, loss of control or going crazy. The cause of this anxiety is related to the anticipation of these attacks. In the second type of anxiety state, the dominant issue is unrealistic or intense anxiety and worry that is related to various life situations and not to the expectation of asthma attacks. In this type of anxiety, a wide range of physical symptoms such as muscle tension, restlessness, rapid fatigue, shortness of breath, palpitations, sweating, dry mouth, difficulty concentrating, insomnia and irritability may be observed. These two types of anxiety are roughly equivalent to the anxiety disorder and generalized anxiety disorder in the Diagnostic and Statistical Manual of Mental Disorders. However, it should be noted that the majority of patient's experience both types of anxiety. The central idea in cognitive models of emotional disorders is that what is responsible for the generation of negative emotions such as anxiety, anger, or sadness is not the event itself, but rather the expectation and interpretation of those events that are associated with anxiety in the interpretation or physical. important cognitive perceptions of psychological, or social danger. In today's life, anxiety can play a useful role in many situations that involve real danger, but when fear arises from a misconception, the responses activated by the anxiety program are not proportional to the situation. Instead of taking on a useful role, these responses are often interpreted as other sources of fear, and this leads to a vicious cycle that tends to perpetuate and intensify the anxiety response. For example, blushing can be seen as a sign that someone has caused a scandal, but blushing itself leads to embarrassment and further blushing. Because of this interrelationship between perceived danger and anxiety symptoms, an important part of cognitive behavioral therapy is devoted to fears related to the physical, behavioral, and cognitive symptoms of anxiety. In cognitive models of emotional disorders, two different levels of disordered thinking can be distinguished:

1- Negative automatic thoughts, which are thoughts or mental images that appear when a person is anxious in a particular situation. For example, someone who is worried about social evaluation may find, when speaking among a group of acquaintances, the negative automatic thought that "they think I am boring."

2- Dysfunctional assumptions and rules, which are general beliefs that people have about themselves and the world that predispose the person to interpret certain situations in an excessively negative and dysfunctional way.

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