

Smart Technologies for Sustainable Development

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PREFACE

The book titled “Smart Technologies for Sustainable Development” is an edited book. This book is unique in nature, where the authors have selected different sectors and give insight about the chosen sector. This book is also designed as per the need of the students of Commerce and Management, M.Phil and will also be helpful for the Ph.D. Scholars.

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COGNITIVE BEHAVIOURAL THERAPY FOR SOCIAL ANXIETY DISORDER

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INTRODUCTION

Social anxiety disorder (SAD) is a highly prevalent psychiatric disorder which is characterized by intense and persistent fear. It is also known as social Phobia, which causes fear and avoids social situations [7]. Social phobia people have greater distress in a wide range of social situations. According to DSMIV, the person showing specific embarrassing situations in a social situation is assessed negatively by the people so they avoid themselves in that particular situation. The primary symptoms of social anxiety disorder are sweating or heart palpitations [8]. Social anxiety is an excessive emotional discomfort, fear, or worry about social situations. The individual is worried about being evaluated or scrutinized by other people, and there is a heightened fear of interactions with others. Cognitive-behavioral therapy (CBT) is a type of psychotherapeutic treatment that helps people learn how to identify and change destructive or disturbing thought patterns that have a negative influence on behavior and emotions. Cognitive-behavioral therapy (CBT) is a form of talk therapy that is more effective for a range of problems including anxiety disorders, depression, alcohol, and several mental

illnesses. It explores the links between thoughts, emotions, and behavior [6]. CBT is a combination of behavioural and cognitive therapies. CBT is a hands-on approach which requires both the therapist and the client to be invested in the process and willing to actively participate. They work to find out the problems faced by the client, strategies to overcome it, and create positive solutions (Martin, 2016).

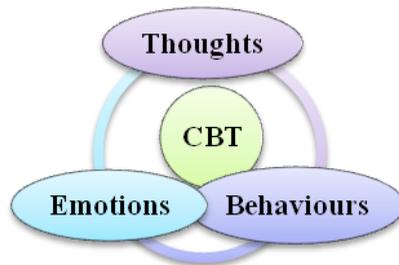


Figure.1. Showing the Cognitive Behavioural Therapy

CBT treatment regimens last from five to ten months. CBT aims to change our thought patterns, our conscious and unconscious beliefs, our attitudes, and, ultimately, our behaviour, in order to help us face difficulties and achieve our goals [10]. CBT emphasizes the importance of thinking patterns of the people. It introduces the clients to a set of principles that can be applied based on their need throughout their lifetime [11]. Cognitive-behavioral therapy focuses on changing the automatic negative thoughts that can contribute to and worsen emotional difficulties, depression, and anxiety. These spontaneous negative thoughts have a detrimental influence on mood. Through CBT, these thoughts are identified, challenged, and replaced with more objective, realistic thoughts. Now a day's people are panic with the pandemic virus COVID 19. This leads to severe social anxiety and excessive emotional discomforts. This can be overcome with

the help of CBT. CBT is not one set method but rather a combination of various techniques that depend on the disorder.

HISTORY OF CBT

The development of cognitive behavioural therapy progressed over time. The following chart shows the history of CBT. Dr. Aaron Beck is the founding father of the cognitive behavior therapy movement. He started his work as a clinician in the 1960s. His work with irrational thinking was foundational in the development of CBT. His ABC technique of Irrational Beliefs is still utilized in CBT today

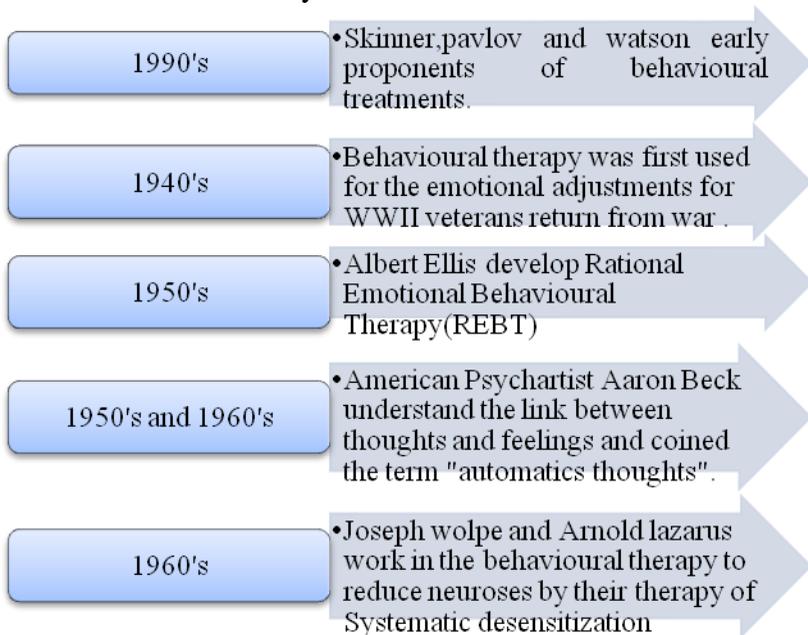


Figure.2. Showing the history of CBT

COMPONENTS OF CBT

According to Beck (1976), there are three levels of cognition they are core beliefs, Dysfunctional assumptions, and Negative automatic thoughts

- Core beliefs – It is generally learned in early life and is influenced by their childhood experiences.
- Dysfunctional assumptions – They are rigid conditional rules for living. They may be unrealistic and maladaptive.
- Negative automatic thoughts – In these thoughts are involuntarily activated in certain situations.

The critical components of CBT are

Functional analysis - It's an initial step in which the client and counsellor assess high-risk situations such as interpersonal difficulties, euphoria, etc. functional analysis of substance use episode which helps to identify the difficult situation of the client[15].

Skill training - In skill training clients relearn healthier skills and remove unwanted old habits from their life. It helps to recognize and cope with the urges to use substances. This counsellor needs to match the content and present new skills and behaviours to the clients[15].

Principles of Cognitive behavioural therapy

Following are the principles involved in CBT are

1. Cognitive behaviour therapy is based on the client's problem.
2. It requires sound therapeutic alliance such as depression, anxiety disorders, etc.
3. It emphasizes collaboration and active participation.
4. It is goal-oriented and problem – focused.
5. It strongly focuses on current problems in specific situations.

6. It educates the clients about relapse prevention. It gives a remedy for a problem in a short time.
7. Therapy sessions are highly structured.
8. It helps clients to identify, evaluate, and respond to their dysfunctional thoughts.
9. In CBT homework is the important one in which the therapist assists and monitors the client in between his feelings and behaviours [11].

TECHNIQUES USED IN CBT

Cognitive Behavioural Therapy involves both cognitive and behavioral techniques

- **Cognitive Techniques-** It helps to understand the patient's view of things. It is also called as 'guided discovery' [1]. It is based on the Socratic questioning, helps clients or students to conclude without directly telling them. Therapists use questions to probe a client's assumptions. He raises the question and finds out the reasons and evidence for their beliefs [15].
- **Behavioral Techniques-** These techniques involve obtaining a baseline of activities. It helps patients to re-establish daily routines, reduce unpleasant activities, and deals with problems and issues by increasing problem-solving. Behaviour experiments are also used to help patients to gather evidence against the use of 'safety behaviours'[15].

STAGES IN CBT

There are four important stages in CBT they are



Figure.3. Stages involved in CBT

- **Assessment stage** - In this stage, both clients and therapists get to know each other. Through this meeting, the therapist will get some idea about how long the treatment might take.
- **Cognitive stage** - The therapist works together with the client to understand his thoughts. They may discuss some past events happen in the client's life.
- **Behavioural stage** - Therapists find the new patterns of thinking to new behaviours.
- **Learning stage** - The therapist and client make sure that the changes are permanent. The client uses the principles of CBT for his future [17].

ABC MODEL OF COGNITIVE BAHAVIOURAL THERAPY

ABC model of Cognitive behavioural therapy AlbertEllis (1957) is often used at the assessment stage in the therapy [8].



Figure.4.Showing ABC model of CBT

- **Adversity or Activating agent** - This is the first step that helps to record some type of emotional response such as anger, sorrow, anxiety, etc.or negative dysfunctional.
- **Belief**- In this second step, the clients write negative thoughts [8].
- **Consequences**- This is the connecting bridge between the situation and the distressing feelings.

SOCIAL ANXIETY DISORDER

Social anxiety disorder is a mental illness in which a person has a fear of or worry about social situations. It is most common in children and middle-aged women [19]. Before the term 'anxiety' it was expressed as -stress -or -nerves disorder. Social anxiety disorder leads to fear of social gatherings, fear of public speaking, meeting new people, and avoid social situations [5]. In students, social phobia decrease educational performance, increase alcohol intake avoid seminar presentation, competition like debate, speech and develop depressive symptoms, etc. Based on the historical developments in this field it can be described in three stages

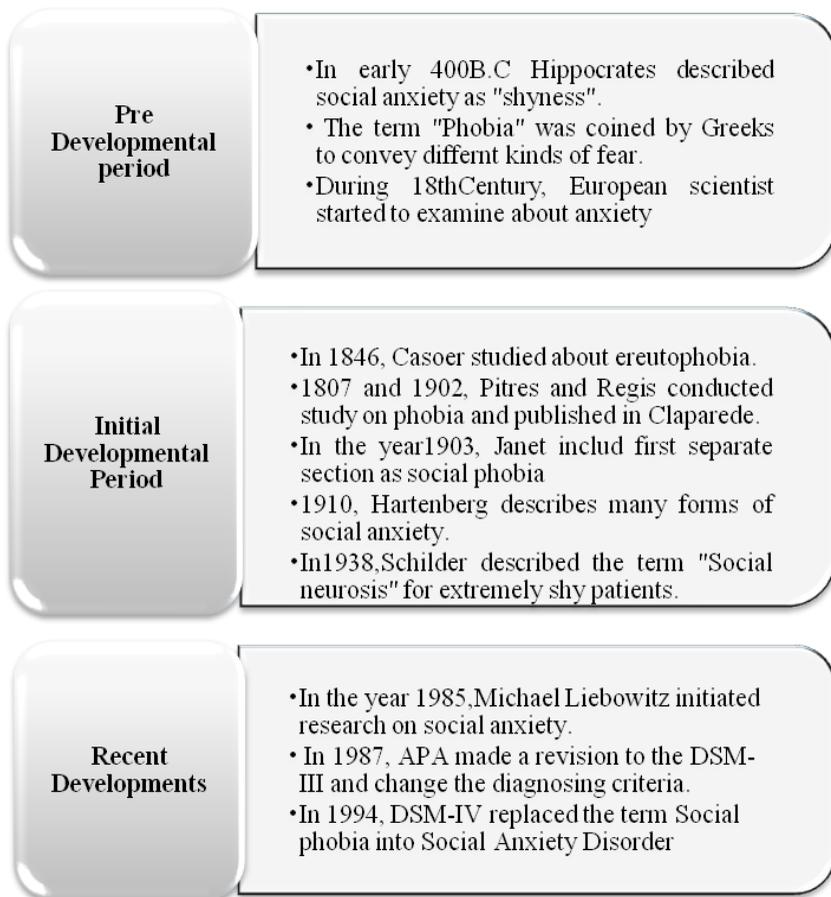


Figure.5. Historical development of Social Anxiety Disorder

CAUSE OF SOCIAL ANXIETY DISORDER

Genetic- The genetic component of social anxiety disorder is also known as 'heritability'. It is the proportion of variability in a phenotype. Many researchers have found that specific chromosome in the humans also linked with an anxiety disorder such as agrophobia.

Environmental- Environment also one of the causes of anxiety disorder it may be due to direct conditioning, observational learning, and information transfer.

- **Direct conditioning** - In which students often become the victim of constant teasing or bullying which affects the psychological state of the child and later it becomes anxiety.
- **Observational learning** - In observational learning the child did not experience a traumatic situation. Due to the exposure to that sort of the first-hand situation in their life may create anxiety in the children.
- **Information Transfer** - This is due to the verbal or nonverbal information transfer from the parents to children about the dangers of the social situation even the horror stories may develop anxiety in young children.

Behavioural inhibition in the childhood - Toddler becomes upset in the new situation while they are carried by an unfamiliar person. Due to it they may cry, withdraw, or seek their parent's help. This behavior is called behavioural inhibition in later cases these children are more vulnerable to the social anxiety disorder come to other children [2].

Societal factors - The children growing up with a strong collectivistic orientation may feel uncomfortable and may develop anxiety.

Brain structure - The limbic system of the brain which affects the mood in anxiety level due to the increased blood flow in the amygdala which may lead to social anxiety. The increased blood flow in the cerebral cortex which is associated with thinking and evaluation of the person. This can be checked by using neuroimaging called Positron Emission Tomography (PET).

Neurotransmitters- Neurotransmitters in the brain help to transfer signals from one cell to another. The neurotransmitters involved in the anxiety disorder are

- **Norepinephrine**
- **Dopamine**
- **Serotonin**
- **Gamma-aminobutyricacid (GABA).**

SYMPTOMS OF SAD

Symptoms of SAD can be physical, cognitive and emotional

- **Physical symptoms** - SAD people become severe escalate into a full-blown panic attack. They often fear of social and performance-related situations rather than fears. They often are isolated from others, depressed in all situations, and fear of the crowd.
- **Cognitive Symptoms** - They usually has dysfunctional thought patterns. Always bothered by negative thoughts and self- doubt when it comes to social and performance-related situations
- **Behavioral Symptoms** - They tend to make choice based on fear and avoidance rather than actual preferences, desires, or ambitions.

PSYCHOLOGICAL TREATMENT FOR SAD

Psychological treatment is important for social phobia treatment. It helps the clients to come out from the negative feelings and beliefs [20].

There are three basic forms of psychological treatment available for Social phobia they are

- **Social skill training** - This theory gives more relaxation and confidence to the client. It increases social interaction by giving them more conversations with strangers.

- **Exposure Therapy** - It gives gradual desensitization to the client in the fear situation.
- **Cognitive Behavioural Therapy** - It brings a realistic and factually accurate way of thinking about fearful situations. The main goal is to confront their anxieties.

COGNITIVE BEHAVIOUR THERAPY FOR SOCIAL ANXIETY DISORDER

CBT is a time-limited and present-oriented approach that strives to empower the patients. Therapist act as observer and coach he teaches coping skills with the help of CBT. Therapist act as a teacher or coach according to the type of CBT. The four modalities for the treatment of SAD are Exposure of feared social situations, Cognitive restructuring, Relaxation training, and social skill training[21].

Exposure to a feared situation- In this method the client is exposed to the feared situation. The first stage of exposure treatment is the collaborative development of a list of situations that provoke anxiety for the patients. The clients are practiced to keep their anxiety in a tolerable range. The patients are guided to practice in the least fear situation. They are allowed to engage in the feared situation and pay full attention to the situation.

Cognitive Restructuring- The first step in cognitive restructuring is the identification of negative thoughts. The patient and the clients evaluate the accuracy of the thoughts using Socratic dialogue. Patients often hold erroneous beliefs that engaging in safety behaviors allows him or her to manage their anxiety successfully and that the implementation of safety behaviors will prevent feared catastrophes[22]. This helps the patients to revise their judgments about their feared situations.

Relaxation Training - It helps the patients to learn and control the degree of psychological arousal of feared events. In this training, 16 muscle groups are involved and continuous practice

leads to rapid relaxation. The clients learn to relax their body muscles during their anxiety problems. They recall the techniques whenever they require in everyday activities.

Social Skills Training - Social anxious patients exhibit behavioural deficiencies such as poor conversation skills and poor eye contact. Common social skills training techniques include therapist modeling, behavioral rehearsal, corrective feedback, social reinforcement, and homework assignments [13].

HOW TO BUILD YOUR SELF ESTEEM

Social Anxiety Disorder is low self-esteem or lack of self-worth. The following are the few ways to enhance self-esteem among SAD people [4][1].

- Creating a good lifestyle to nourish self-esteem
- Avoid to say –self-put down, and avoid self-criticizing.
- Be positive and focus on the present by avoiding the past.
- Should avoid self-guilty about mistakes, instead learn from mistakes
- Always think about the cause and effect of the problem.
- Love yourself and find pleasure in simple things in life.
- Invest money and time for their growth and always believe that they are precious and worth it.
- Schedule your valuable time.
- Must know about self likes and dislikes and make a list.
- Be assertive and express your thoughts and feelings without fear.

CONCLUSION

Social anxiety disorder is a major problem in the young generation. It involves physical symptoms such as nausea, shaking, feeling faint, etc. This disorder should be treated in the early stage otherwise which may lead to a serious problem in the children. Various treatment is available for this disorder. CBT, a

form of psychotherapy that is more effective and short term therapy for SAD. So children should be monitored by their parents and teachers in their early growth stage to avoid this sort of disorder. CBT can be provided by both online and offline mode which helps the therapist and client to check their progress rate often. All the students in the classroom should be given equal opportunity for oral presentation, debate, and speech this may reduce the fear and increase self-confidence in the student.

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