Role of Cognitive Drill Therapy in Treatment of Evaluation Anxiety: A Case Study

Bhavana Arya[1], Sandhya Verma[2], Rakesh Kumar[3,*], Ruchir Mishra[4]

[1]Assistant Professor, Department of Psychology, The IIS University, Jaipur, India
[2]Scientist 'D' DIPR, DRDO, India
[3]Head, Department of Clinical Psychology, Institute of Mental Health and Hospital, Agra, India
[4]PG Scholar, DIPR, India

DOI: 10.29322/IJSRP.8.5.2018.p7743
http://dx.doi.org/10.29322/IJSRP.8.5.2018.p7743

***Abstract*-** Fear of public speaking is a highly prevalent condition that can adversely affect the social and occupational life of an individual. Cognitive Drill Therapy (CDT) is a new approach to the treatment of stimulus bound anxiety. CDT utilizes the basic tenets of classical conditioning, operant conditioning, cognitive appraisal and linguistics. This case demonstrates the role of cognitive drill therapy in the treatment of fear of public speaking. The planned application of CDT resulted in significant reduction in the fear of public speaking. Pre and post intervention scores showed a marked difference in the anxiety experienced by the subject. Based on the theories of Emotional Processing and Inhibitory learning, CDT is a highly potential candidate to be added to Exposure therapies

***Index Terms*-** evaluation anxiety, fear of public speaking, cognitive drill therapy

I. INTRODUCTION

Watson and Friend (1969) first defined fear of negative evaluation (FNE) as "apprehension about other's evaluations, distress over their negative evaluations, and the expectation that others would evaluate oneself negatively(p.449)." FNE is characterized by anxiety, submissiveness, and social avoidance in situations where the individual feels scrutinized by an audience. Subjects high on FNE are also more sensitive to situational factors. Speaking in public is a situation which has a high potential to trigger FNE.

Most people feel uncomfortable when they speak, eat or drink in public. It is also not uncommon to feel uncomfortable while interacting with strangers, people of the opposite sex, and authorities, and being the center of attention and/or the target of criticism (APA, 1994; Crippa et al., 2007) where one feels observed and fears evaluation. Social anxiety is characterized by a constant fear and worry in various social situations, especially those which involve performance in front of others.

Anxiety is experienced when behaviour and/or achievements are evaluated The evaluations may be formal or informal. The core belief is that during evaluation they will be found deficient or inadequate by others (Donaldson, Gooler & Scriven, 2002). People suffering from high evaluation anxiety may imagine devastating interpersonal consequences with very little or no correlation with what actually happens. These imaginations generally have very poor predictive value (Leitenberg, 1990) but might result in severe anxiety even in anticipation of being in such a situation.

Evaluation anxiety, or anxiety resulting from fear of evaluation or from a specific stimulus can be treated through cognitive and exposure therapies. Cognitive drill therapy (CDT) is a new approach to the treatment of stimulus bound anxiety (Kumar et al. 2012). The therapy is based on the theories of conditioning, cognitive appraisal and linguistics. Cognitive drill therapy is fast relieving and time efficient that makes the person independent to face the specific situation. The therapy is useful in patients who have stimulus bound anxiety, specifically when exposure of the anxiety related cues in imagination elicits an anxiety response. CDT has given promising results in phobias (Verma, Arya, Kandhari & Kumar, 2018), OCD (Arya, Verma & Kumar, 2017) and agoraphobia and panic disorder (Dwivedi & Kumar, 2015). The current case study illustrates the effectiveness of cognitive drill therapy in a case of evaluation anxiety.

Exposure and response prevention therapies have been successfully used in th treatment of irrational fears. An individual with irrational fears is exposed to the feared stimuli in imagination and/or *in vivo* along with prevention of avoidance response. Cognitive drill therapy is novel approach to the treatment of stimulus bound anxiety developed by Rakesh Kumar (Arya, Verma & Kumar, 2017). CDT is based on the principles of verbal exposure to the stimulus. When the stimulus is presented verbally, the subject imagines the stimulus and experiences a surge of anxiety response which gradually declines. CDT conceptualizes fear as having four components:

O- Objects of fear.
B- Body Mind Reactions
S- Safety Behavious
D- Danger Perceptions

The object of fear (speaking in public), causes physiological and psychological responses (trembling, nervousness, butterflies in the stomach, irritability, lack of concentration). Subject copes by avoiding the situation (chosing not to speak) as he thinks that the situation is dangerous due to various reasons (people will make fun, self image, etc.) The fear is understood as a two layer structure. The subject is overwhelmed by the top layer (O and B) and is stuck in it due to

which rarely thinks about the real cause of fear embedded in the bottom layer (S and D).

In CDT, the patients are required to repeat the underlying feared cognition of future orientation by converting it into past or present framework. The repetitive verbalizations in this manner lead to typical anxiety curve (bell shaped curve) of rising and declining pattern of anxiety. The drill of feared consequences leads to faster extinction; dissociation of the functional links between anxiety provoking stimuli and anxiety response.

During anxiety, a person holds a future perspective at cognitive level which gets reflected in the language of the patients which consists of frequent use of future tense. For instance, I will make mistakes, I will not live up to the expectations of others, people will ignore me, etc.

It is hypothesized that this future perspective may have its specific neurobiological correlates (Kumar, 2017). When a person turns towards this future orientation, the related neurobiological process get activated which maintain the anxiety response.

She was seeking help for getting rid of fear of public speaking as she thought that she lost many opportunities because of that fear. She followed 4 sessions and showed improvement on it.

II. Case Summary

The case is of RM, a 21 year old female from middle socio economic status. She was attending a private college with no history of psychiatric disorder. She reported having extreme fear of public speaking. At the age of 14 years she was singing in a group. She had the mike in front of her and made a mistake for which the teacher slapped her. After that she became extremely nervous and avoided any such situation due to which she lost a lot of opportunities and faced failure many times. She desperately wanted to participate in debates and other forms of public speaking but experienced severe anxiety on any such instance. Due to this she lacked confidence and suffered from negative self image. RM sought help to overcome this fear of public speaking.

Assessment

The Liebowitz Social Anxiety Scale (LSAS; Liebowitz, 1987) is a 24-item measure. It is used to assess both fear and avoidance of social (e.g., going to a party, meeting strangers) and performance situations (e.g., taking a test, giving a report to a group) occurring in the last week. Items are rated on a five point scale from 0-4, with high scores representing more fear and/or avoidance. Due to the simplicity of the self-report version of the scale it can be effectively used as a screening tool for social anxiety disorder (Rytwinski et al. 2009). RM scored 39(Fear) and 29 (Avoidance) = 68(Marked Social Anxiety)

Case formulation:

The cognitive model of social phobia was used to formulate the case. The model explains the occurrence and maintenance of the fear of public speaking.

Her anxiety was conceptualized as respondent behavior elicited by a range of external cues such as facing a group of people (known or strangers), people in authority and internal cues like fast heart rate, dryness in throat, tremors in left body, sweating, words and thoughts related to failure, disapproval, ignored, and criticism.

She avoided anxiety provoking situations which resulted in negative reinforcement and maintained her avoidance of external situations which could potentially activate feeling of rejected by others. Besides, avoidance at overt level, she also had avoidance at cognitive level. She avoided considering encounters with potentially anxiety provoking situations even at covert level.

The external and internal cues elicited anxiety response (classical conditioning) and avoidance of such anxiety provoking situations at cognitive and behavioral level resulted in anxiety reduction which served to maintain the anxiety response (operant conditioning).

Application of Cognitive Drill Therapy

Psycho-education:

Psycho-education regarding illness is the core foundation of the application of CDT. RM was explained that she is having evaluation anxiety. The symptoms of these conditions were enumerated and explained. She was told that she was trying to manage her anxiety by avoiding the anxiety arousing situations. The avoidance resulted in temporary relief which acted as reinforcement instead of improvement. Instead of avoidance, she required to expose herself to anxiety provoking situations. This exposure would initially boost the anxiety response and in the process would get reduced. She was also explained the concept of cognitive exposure. The concept of excessive use of future perspective during anxiety activation was also explained. She was told that she would be trained to expose herself to anxiety provoking situations at cognitive level and integrated the tweak of future perspective into past or present perspective. Appropriate examples were used to clarify the concepts and applications of CDT. She was asked to continue her drilling.

OBSD Analysis:

Objects (O) or anxiety arousing situations were identified by RM. All situations where she was watched and felt evaluated aroused anxiety. Specifically the following situations were identified: speaking in front of an audience, singing in front of an audience.

Body-Mind Reactions (B): RM experienced severe physiological and psychological reactions at the thought of speaking in public. Her body reactions were characterized by shivering, tremors, accelerated breathing rate, throat dryness on even the thought of being in above reported situations.

Safety-Behaviors (S) Complete avoidance of any such situation is the safety behavior adopted by her.

Danger Perception (D) or feared consequences were identified as follows:

1. She might make a mistake

She will be ridiculed by people
She will make a fool of herself
People will make fun of her
People will reject her
She will look foolish
Seniors disapprove of her

Drill Statements: Corresponding to her thoughts of danger perception, the drill statements were formulated by converting the future tense orientation of such thoughts to past or present.

1. I am on stage and have made a mistake

People are criticizing me and trying to push me off the stage
People are thinking that I am a fool

Execution of Cognitive Drill: Psycho education helped RM to develop an insight into the nature of anxiety. To execute the drill, RM was asked to imagine the object of fear (O) and keep on repeating the drill statements one by one. For each object the drill was performed and the BMR was monitored. If BMR reached a high level the drill was paused. When she became comfortable with one drill statement, she was moved on to the next one.

Table-1: Pre-post Monitoring of BMR and Fears on Visual Analogue Scale (VAS) of Five Points

Danger Perception	Body Mind Reactions BMR	BMR Ratings (VAS 0-5)		Fear Ratings (VAS 0-5)		Cognitive restructuring
		Pre	Post	Pre	Post	
I am on stage and have made a mistake	Mind has gone blank; extreme pain in the right side of the head	5, 3, 2	0, 0, 0	4, 1, 1	0, 0, 0	*Its Ok. I will not be ashamed.*
People are criticizing me and trying to push me off the stage	Left leg jerking Shivering under shoulder for 2 seconds Headache	5, 4	0, 2	5, 5	0, 0	*People criticize anyways. It is their job to criticize and my task is to finish my job*
People think I am a fool	Headache	2, 0, 0	0, 0, 0	4, 2, 0	0, 0, 0	*I don't need to pay heed to people*

Drill was done at verbal, auditory and visual levels. It was observed that when there is an extinction of anxiety response to the anxiety cues at verbal and imagination level, there is usually an automatic generalization to the real world cues in most of the instances. This client when exposed to anxiety cues at cognitive and verbal level, showed minimal or no anxiety to the real world situations. This cross-modality generalization is significantly useful for the purpose of therapy, economic in terms of pain experienced during live exposure like cognitive and verbal exposure and quite faster in resolution of anxiety. Cognitive drill seems to have an inbuilt component of relapse prevention. Because during the course of treatment, a patient learns to identify anxiety cues, formulate drill statements and perform cognitive drill on the fly. Through the intensive treatment it becomes an integral part of coping with the anxiety provoking situations. She also reported that whenever she find herself in any anxiety provoking situations, she detects her sensations and anxious cognitions and immediately perform the drill upon them after making drill statement.

Home-Work

She was asked to consider our sessions as training sessions, learn the procedure of cognitive drill therapy and apply the same concepts outside therapy sessions. Specifically, she was told to recognize anxiety cues and practice cognitive drill. Drill & Daring was prescribed. She is to face social situations with simultaneous covert drill.

III. Discussion

The application of cognitive drill therapy over 7 sessions produced substantial and clinically significant changes in her social anxiety, body sensations and these were maintained on follow ups. She also showed meaningful improvement in her social relations, self efficacy, and engagement in gathering, initiated the conversation and sometime led too.

Cognitive drill uses principles of exposure therapy. Exposure at cognitive and verbal level causes extinction and habituation of acquired anxiety response (Watson & Rayner, 1920; Lovibond, 2004). The words and images of anxiety cues elicited anxiety in her, and when exposed repeatedly to those words and images at cognitive and verbal level it led to extinction and habituation. The cognitive drill is also likely to enhance self efficacy and other faulty cognitions which are also observed in this patient.

IV. Conclusion

The case study shows the cognitive drill therapy is intensive and time efficient that can be applied on such types of clients. A clinically significant improvement could be achieved in the relatively short time of four weeks and the gains of therapy were maintained on further follow up.

References

[1] American Psychiatric Association, (2013).Diagnostic and statistical manual of mental disorders: DSM- 5.Washington American Psychiatric publishing.

[2] American Psychiatric Association (1994).Diagnostic and Statistical Manual of Mental Disorders DSM- 4.Washingtonn: DC.

[3] Arya, B., Verma, S., & Kumar, R. (2017). Efficacy of Cognitive Drill Therapy in Treatment of Specific Phobia. SIS Journal of projective psychology and mental health, 24, 48–51.

[4] Crippa, J. A., Loureiro, S. R., Baptista, C. A. &Osório, F.L. (2007). Are there differences between early and late onset social anxiety disorder? RevistaBrasileira de Psiquiatria, 29, 195-196.

[5] Donaldson, S. I.,Gooler, L.E. &Scriven, M. (2002). Strategies for managing Evaluation anxiety: Toward a psychology of program evaluation.American Journal of evaluation 23, 261-273.

[6] Dwivedi, S., Kumar, R. (2015). Efficacy of Cognitive Drill Therapy in agoraphobia with panic disorder: A case study,SIS, Journal of projective psychology and mental health,22(2), 150-157.

[7] Foa, E. B., Franklin, M. E., Perry,K. J.& Herbert, J. D.(1996). Cognitive biases in generalized social phobia. Journal of Abnormal Psychology, 105, 433-439.

[8] Jain, R. (2015). Professional Manual Cognitive Drill Therapy. Agra: Self Published.

[9] Kumar, R. (2017). Verbal Exposure for Irrational Fears: New Directions in Research and Applications. Clinical and Experimental Psychology 3:157. DOI:10.4172/2471-2701.1000157

[10] Kumar, R., Sameer, A., & Singh, B. (2012).Preliminary Test of Cognitive Drill as an Intervention.Indian Journal of Clinical Psychology. 39, 67-74.

[11] Kumar, R., & Dubey, B. L. (2016). Cognitive Drill Therapy: A Potent Application of the Principles of Psychology for OCD and Phobia. SIS Journal of Projective Psychology and Mental Health, 23(2), 125-126.

[12] Leitenberg, H. (1990).Handbook of Social and evaluation anxiety(1sted).Springer science & business media.

[13] Liebowitz, M. R. (1987). Social phobia. Modern Problems of Pharmacopsychiatry, 22, 141-173.

[14] Lovibond, P. F. (2004). Cognitive processes in extinction. Learning & Memory, 11, 495-500.

[15] Sadock, B. J., Sadock, V. A., Ruiz P., (2015). Synopsis of psychiatry(11th ed). Wolters Kluwer.

[16] Telch, M. J., Cobb, A. R., & Lancaster, C. L. (2014).Exposure therapy.In P. M. G. Emmelkamp& E. Thomas (Eds.), Handbook of anxiety disorders. 2, 717–756. Chichester, England: Wiley. DOI: 10.1002/9781118775349.

[17] Verma, S., Kumar, R., Arya, B., & Kandhari, N. (2016).Treatment of multiple phobias through cognitive drill technique.International Conference of Indian Academy of Health Psychology.Gautam Buddha University, Greater Noida.

[18] Wolberg, L. R., (2013).The technique of psychotherapy(4th Ed).United States of America: International psychotherapy institute Ebooks.

[19] Watson, D., Friend, R., (1969) Measurement of social -evaluative anxiety, Journal of Consulting and Clinical Psychology, 33, pp.448- 457

[20] Watson, John B., & Rayner, R. (1920).“Conditioned emotional reactions.”Journal of Experimental Psychology 3.1: 1.

[21] https://en.m.wikipedia.org.

[22] https://pro.psychcentral.com

AUTHORS

First Author – Bhavana Arya, Assistant Professor, Department of Psychology, The IIS University, Jaipur, India
Second Author – Sandhya Verma, Scientist ‘D’ DIPR, DRDO, India
Third Author – Rakesh Kumar, Head, Department of Clinical Psychology, Institute of Mental Health and Hospital, Agra, India
Fourth Author – Ruchir Mishra, PG Scholar, DIPR, India