## **Behavioural Intervention with Phobic Children**

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#### Abstract

The present study is an attempt to modify the phobic reactions in children through behavioural techniques. A case of zoo phobia and another case of phobia of travel in automobiles have been presented with behavioural analysis, therapeutic programming and outcome.

Key words -

Colour - US - technique, Emotive imagery, Modelling, Desensitization

It is well-known that children and adolescents report a large number of fears throughout their development. Simple phobia (DSM-III-R) is characterized by a relatively circumscribed fear of an object or a situation such as animals, travels, height etc. They are restricted to discrete situation and are not normally accompanied by the generalized anxiety. These phobias are sometimes referred to as specific phobias. Phobias create considerable distress for the growing child, more resistant to change and frequently necessitate therapeutic intervention [1].

When a phobic child is exposed to the fear producing stimulus, a strong emotional reaction is observed. This strong emotional reaction has three basic components viz.

- (i) Subjective feeling of fear and distress,
- (ii) Heightened physiological arousal and
- (iii) Motor response consisting of either withdrawn, frozen behaviour or frenzied flight behaviour [1].

Rachman [2] outlined the conditioning principle involved in the acquisition and maintenance of phobias. Phobias may be learned according to classical, vicarious and operant conditioning. It is probable that they are maintained by a complex interactive process that involves each of these principles. Mowrer's [3] two factor theory explained that phobias are acquired through classical conditioning but maintained through operant conditioning (avoidance strengthen the phobia via negative reinforcement).

Ost [4] suggested that direct conditioning events may be of more importance in the etiology of clinical phobias. Rachman [2], [5] said that severe fears and phobias would be more likely to have direct conditioning etiologies. According to Marks [6], post traumatic disorder overlaps with their specific phobias that start after a trauma such as a car accident or dog bite.

## **The Present Study**

The present study was an attempt to modify the phobic reactions of two children. The anamnesis of the cases are as follows:

#### Case 1:

Master A, aged 6, studying in 2nd standard from a Hindu middle class, born of a nonconsanguinous union, brought with fear to travel in the bus and become fearful when hearing the sound of buses or the sight of buses, of six months duration. Six months back he happened to be in a bus which collided with a scooter where two people died on the spot. The child sustained an injury on the cheek and had stitches for that and recovered within a week. His sister aged 13 also sustained injury on her lips and there was bleeding. After the incident, the child became fearful to travel by bus. Later he showed panic reaction when waiting for the bus in the bus stop. Whenever he got into a bus he used to experience palpitations, stiffness of hands and legs, coldness of hands and tremors; during travel in the bus he used to hold on to the seat tightly, try to go out and sometimes on seeing buses coming from the opposite direction, he used to ask whether there would be another accident. He used to be relaxed following getting out of the bus. Later he developed fearfulness when he head the noise of buses, lorries and trains.

### Case - II

Mater R, aged 12, studying in 8th standard, came from a Hindu middle class family from a rural background. He was brought with the complaints of episodic abnormal movements of body. It was of 3 ½ months duration. Three and a half month ago, one day the child saw a wild bear on his way to the school. He was alone and became extremely terrified looking at it. The bear did not try to attack him, but it ran away immediately. He was feeling very fearful since then. Three days later when he was attending the school prayers, he complained of headache, pain in the abdomen and feeling thirsty. He was given water and made to sleep. Then he exhibited bizarre tapping and kicking movements of all 4 limbs which lasted for an hour. After that he used to get such attacks 1-3 times per day lasting about 1 to 10 minutes. After the onset of the illness he was being over protected, he was not allowed to do any work, or go to school. No attack was reported during sleep or when he was alone. The child said that after the incident he became fearful and felt uneasy all the time. He found it difficult to stay alone or walk in the darkness Prior to each episode of getting the abnormal movement, he felt extremely fearful, dryness in the mouth, trembling of the hands and legs, dizziness and sweating of the entire body. During this time he would feel that he may die. He was getting fearful dreams of bear during sleep. Both the above cases were referred from the Child and Adolescent Mental Health Unit, NIMHANS, for behaviour therapy.

# **Behavioural Analysis**

### Case - I

Behavioural analysis revealed that the child acquired the phobic reaction following a traumatic

experience. He witnessed the accident and the people who got injured and died on the spot. All these experiences made the child feel fearful, anxious and he thought there would be accidents any time. Later, his fear generalized to lorries and trains and then the sound of buses, waiting in the bus stop etc. He used to avoid buses and vehicles which strengthened his maladaptive behaviour.

### Case - II

The child acquired the phobia after seeing a bear on the way to school. He became terrified thinking that it may harm him. When he described it to the parents they did not take it seriously. He developed abnormal bizarre movements to avoid the stress and fear about which he was preoccupied. He wanted help, attention from others for his problems. So he developed pseudo seizures. Parent's overprotection, not allowing him to go alone or going to school, reinforced to maintain his abnormal reactions. They were instrumental in avoidance of stress for the child. From the sociocultural environment the child had heard lots of stories about bears coming and attacking people; he had an impression that bear means danger. Elders always used to tell him to avoid bears. This further strengthened his fear towards the bears.

### **Behavioural Formulation**

In these cases both the children developed phobic reaction through a single traumatic incident i.e., accident and exposure. Through the process of incubation the reaction increased and further generalization took place to associated stimulus situations. The maintenance of this behaviour was reinforced through avoidance responses and social reinforcement in the form of extreme protection from parents.

# **Therapeutic Programme**

Taking the behavioural analysis and formulation into consideration, the therapeutic procedures selected to form a multimodal intervention were:

- (i) Emotive Imagery,
- (ii) Colour-US-technique,
- (iii) Graded exposure,
- (iv) Modelling,
- (v) Reinforced practice, and
- (vi) Behavioural counselling.

# 1. Emotive Imagery:

This procedure was developed by Lazarus and Abramovitz [7] "... it refers to those classes of imagery which are assumed to arouse feelings of self assertion, pride, affection, mirth and similar anxiety inhibiting responses.

As in the standard method of SD, the details about the nature of the fear reaction is first gathered, hierarchy is constructed, following the principle of gradual approximation. Then the therapist tactfully finds out the most loved person (Hero) whose actions, talks and way of life the child appreciates very

much. The child is asked to sleep on the bed and close his eyes. He is then instructed to imagine certain events pertaining to the life situations. These situations are presented in the form of a story, where he finds his most loved objects are associated. The therapist after observing the positive reactions in the child, tactfully starts introducing (from the lowest end of hierarchy) the items one after the other into the 'narratives' of his story, When he introduces such an item into the story, and if the child is afraid (or unhappy, uncomfortable) the therapist immediately, through the medium of narration, changes the anxiety inhibiting items in the story. It is repeated over sessions till the child shows no anxiety or fear.

### 2. Colour-Us-technique [8]:

In this procedure outlines of pictures drawn on large size hard papers ( $12" \times 24"$  size) are used to be painted by the index child. The depiction in the picture is always appropriate to the problem of the child. Blow-ups are drawn out with the picture and positive statements are written inside it for the child to read or the therapist to discuss. This creates desensitization as well as cognitive restructuring for the children.

### 3. Graded exposure:

After making hierarchy in real life situation, a plan of graded exposure to real situation in spare time is planned. In case-I, the child is slowly made to face the bus and travel in the bus in the presence of parents while eating chocolates.

### 4. **Modelling:**

Modelling was used to demonstrate interactive skills to the feared object. For case-1, the process included discussion and play activities related to travelling in the bus, demonstrating how the driver, passengers are sitting in the bus and travelling, making him the driver, passenger of the bus and role play sessions and role rehearsal sessions. In case II discussion with regard to how human beings are capable of controlling wild animals, how to escape from bear, how to tame them, singing songs related to bear in which how human being hunt and tame bears and role rehearsal sessions related to taming bears were conducted.

## 5. Reinforced practice:

Reinforcements given to the child in terms of praise, material things like chocolate, toys for non fearful behaviours. The reinforcements were from the parents and therapist.

## 6.Behavioural counselling:

This was done mainly for the significant others making the parents not to say fearful things related to buses or bear to the child, how to use time-out when child shows fear, how to use reinforcements for desired and non desired behaviours.

#### **Assessment**

Assessment was done by self report, parents report and independent judge.

The following table shows the process of therapy

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## **Outcome of Therapy and Discussion**

The total number of sessions for the first case is 15 and second case is 11 stretched over a period of nearly 20 days. At the time of discharge both children were symptom free and able to resume their studies and normal reactions to situations. In the first case he started travelling in the bus without any fear response for short and long distances. Anxiety symptoms like palpitation, stiffness of hands and legs, tremors, holding the head tightly and crying disappeared. He started responding normally to the noises of buses, lorries and trains.

In the second case, from the 5th session onwards the bizarre tapping and kicking movements of the four limbs were decreased in frequency and slowly disappeared, Symptoms like fearfulness, dryness in the mouth, trembling of hands and legs, dizziness and sweating have disappeared. Dreams of bear also disappeared.

Follow up of both the cases have been done. In the first case, a follow up of 6 months reveals the maintenance of the modified behaviour pattern, whereas in the second case, in spite of repeated reminders no response could be obtained as the case was from a distant rural location.

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