

COMBATING AGGRESSION IN INSTITUTIONALIZED CHILDREN WITH PHYSICAL EXERCISE AND MUSIC

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SUMMARY

The results of a short-term trial of combating aggression in 20 institutionalized children of both sexes in the age range of 10-14 years are presented in this paper. Vigorous physical exercise and learning vocal music were the two remedial therapies employed. Results indicate that the experimental group significantly increased its Group Conformity Ratings after the treatment. As far as the direction of aggression is concerned, the experimental group significantly reduced its extrapunitive responses. On the reaction of frustration, the experimental group improved its ego-strength after the treatment. The results are indicative of a better level of adjustment by the experimental group as a result of the therapies.

A wide range of aggressive behaviors may be seen in day to day life situations, ranging from sibling rivalry to homicide and war. Since the turn of century, many theories of aggression have been formulated. Explaining the causes and effects of human aggression, Freud (1920) perceived it as an inborn device and an unavoidable motive in human beings. He did however suggest that the development of emotional ties between people and regulatory devices such as vigorous sports could lessen its impact. In 1939, Dollard et al proposed the frustration-aggression hypothesis which involved 2 basic assumptions:

(a) aggression is always a consequence of frustration, and (b) the occurrence of aggressive behavior always presupposes the existence of frustration. The social learning theory propounded by Bandura (1973) emphasizes as causative agents the long term and immediate social setting as well as the emotional and cognitive 'set' of both potential aggressor and victim.

The cathartic or cleansing effects of aggressive acts through sports, exercise, play and tasks involving physical skill have been well documented (Scott, 1968; Johnson & Hutton, 1955). The frustration - aggression hypothesis is useful in the interpretation of a wide range of psycho-social phenomena and criminality, socialization process, adolescence, politics, etc. may be understood in the light of this theory. Frustration and aggression have also been studied in relation to murder (Palmer, 1960).

Institutionalization per se is a major source of frustration and insecurity. The long term effects of institutionalization have occasioned a great deal of controversy. More than maternal deprivation, the simple lack of stimulation that is inevitable in such an environment seems to be the deciding factor for the detrimental effects of institutionalization. Hence, a number of researchers have been concerned with providing more optimal conditions of care in the institutional environment with brief experimental interventions employing limited kinds of stimulation. Owing to a number of factors like inadequate stimulation, mothering and socialization in the early period, there exists a possibility of many children harboring a non-specific frustration and as a sequel, overt and/or covert aggression towards oneself or the environment.

In this study, an attempt was made to detect children with overt aggression and to combat their aggressive ten-

dencies by (1) Physical exercise (2) Pastime activity like learning vocal music.

MATERIALS & METHODS

Twenty children of both sexes in the age range of 10 to 14 years were selected from a larger sample. The study sample was drawn from a local Home for Destitute children. To rule out intellectual handicaps, children with an IQ of less than 80 on the Binet-Kamat test (1964 revision), as well as children with sensory and motor handicaps were excluded. The children were rated as 'overly aggressive' on a 4-point rating scale by the matrons and teachers based on the following criteria:

1. He/she had injured another person either physically and/or psychologically.
2. Displayed destructive tendencies towards other's belongings.
3. Acted aggressively even under mild conditions.

The term 'Aggression' is viewed in a flexible manner reflecting behaviors that are situational specific for the measurement of the direction of aggression and reaction to frustration. Rosenzweig's Picture Frustration study (Hindi Version) as adapted and standardized by Pareek (1959) was used. This test is most adequately normed and possesses a high index of validity and reliability. Like the original study, the Indian adaptation consists of 24 situations depicted in cartoon-like pictures. In every situation, a child is shown frustrated; in about half the situations, the individual who inflicts the frustration is an adult and in the other half, a child. It is assumed that the subject unconsciously or consciously identifies himself with the frustrated individual in each pictured situation and projects his own bias in the replies given. To determine this, scores are assigned to each response as to direction of aggression and reaction type.

Under direction are included extrapuniveness (E): in which aggression is turned on to the environment; intro-puniveness (I): in which aggression is turned by the subject upon himself; and impunitiveness (M): in which aggression is evaded in an attempt to gloss over the frustration. Under types of reaction are included obstacle dominance (O-D): in which the barrier causing the frustration stands out in the responses; ego-defense (E-D): in which the ego of the subject predominates; and need-per-

sistence (N-P): in which the solution of the frustrating situation is emphasized.

From the combination of these categories, there results for each item nine possible scoring factors. Apart from these, the Group Conformity Ratings (GCR) can also be obtained by comparing the scores of the subject on each item with the expected ones as given in the tables of the manual.

Children selected on the basis of the inclusion criteria mentioned earlier, were given the Picture Frustration test on a one to one basis and the responses were entered on an examination blank. In order to facilitate scoring of responses, scoring samples for each situation are presented in the manual itself, which states that these samples are based on the records of about 1000 children of both sexes and in age groups from 4 to 14 years. After the responses on the examination blank were scored, these were entered on the record blank which is compiled for purposes of interpretation. The record blank is the main basis of interpretation, as it shows the frequencies and percentages of the various factors, the significance of which is interpreted with reference to the 'norm' values appearing in the manual.

The various factors are to be interpreted according to their definitions. The total E-D score may be said to represent strength or weakness of the ego while the N-P score may show adoptive adequacy. GCR may be regarded as "one measure of the individuals adjustment to a normal group".

After assessment on the P.F. study, the children were matched for age, sex, education and duration of stay in the institution and allocated to experimental and control groups of ten each.

The experimental group was exposed to the following therapies while the control group was allowed to play some in-door games to offset the effect of individual attention.

(a) Physical Exercise:

Physical education classes were conducted for 1 hour daily. Suitable games also formed a part of this therapy through which the child could release his aggressive energies. Children were allowed to play very freely or even destructively either singly or in groups, so much so that at the end of each class, they 'sweat out' their aggressive energies.

(b) Pastime activity:

Vocal music was taught by a qualified teacher. Channelization of the aggression into a pastime activity which at best gave pleasure, competence and achievement was provided by this therapy. The duration of the project was 3 months at the end of which assessments were repeated.

RESULTS AND DISCUSSION:-

Table I shows that the Group Conformity Ratings before and after the treatment between groups show low conformity ratings initially which comes approximately to 47%. Lower GCR is directly related to the adequacy of

social adjustment. Pareek (1964), while attempting a discriminate validation of his tool, also found a lower GCR for institutionalized children with behavior problems. Mishra (1981) employing the same P.F. study corroborated these findings. From the GCRs after treatment, it is clear that the experimental group significantly differed from the control group by its enhanced GCRs.

Thus, the remedial therapies definitely helped the children in eliciting a greater group conformity rating. Fishman (1965) researched the 'need for approval' trait as

TABLE 1
Data on Group Conformity ratings

Group	Initial GCR	Final GCR	% Increase /Decrease
Experimental	11.1	14.3	28.88
Central	11.0	11.5	4.5

* p <0.02

TABLE 2
Direction of Aggression

Group	Extrapunitive			Intropunitive			Impunitive		
	Initial	Final	% increase /decrease	Initial	Final	%	Initial	Final	%
Exptl	15.6	12.6	-19.2	4.5	5.8	30.8	3.9	5.6	43.6
Control	15.2	14.4	-5.21	5.0	5.3	6.0	3.8	4.3	13.1

* p <0.02

it interacted with aggressive behavior under varying degrees of frustration. He postulated that a decline in arousal of aggression is followed by a higher need for approval. The present findings extrapolate that the high need for approval is followed by greater group conformity.

Table II shows the data on the direction of aggression. The initial scores of both the experimental and control groups follow a similar pattern viz., their aggression is directed towards the environment mostly followed by the other two factors. In other words, in extrapunitive responses, the individual aggressively attributes the frustration to external things or persons, the associated emotions here being anger and resentment and the Psychoanalytic mechanism involved being 'projection'. Comparing the initial and final values of both groups, it was found that the experimental group significantly differed from the control group, in the reduction of extrapunitive responses. In other words, the aggression towards the environment had reduced significantly as a result of the remedial therapies.

Table III shows the data on the reaction to frustration. The initial responses indicate that both the groups show equal amounts of O-D, E-D or N-P reaction types. On comparing the initial and final scores, the experimental group significantly increased its E-D reaction types as compared to the control. Thus, it is apparent that the strength of the ego was predominantly increased in the experimental group due to the therapies given. Ego-strength is related to the level of adjustment of the in-

TABLE 3
Reaction to Frustration

Dimension	Experimental			Control		
	Initial	Final	% change	Initial	Final	% change
Obstacle dominance	3.7	3.9	5.4	3.7	5.3	43.2
Ego defence	11.9	14.6	22.7 [*]	12.4	11.8	-4.8
Need persistence	8.4	5.7	-32.1	7.3	6.9	-0.5

^{*}p <0.02

dividual and therefore this result is very significant. On the other two reaction types, viz., O-D and N-P, the groups did not differ significantly.

The present study is based on the hypothesis that aggression is caused by frustration and that the lessening of frustration, as assessed by various measures, will in turn reduce aggression. The greater Group Conformity Ratings of the experimental group at the post-test is reflective of better social adjustment to a normal group. The decrease in the extrapunitive responses is indicative that their aggression towards the outside world for "putting them in this state of abandonment" has considerably reduced. The increased ego-defence scores of the study sample shows that their ego-strength is enhanced. This indicates that, due to the remedial therapies undertaken, the feelings of frustration harbored by the children at the beginning were considerably reduced at the end of the study. On a regular basis, lessons of physical exercise and learning of vocal or instrumental music or some kind of pastime activity can be undertaken in institutions to ward off frustration and aggression and to promote a better level of adjustment.

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