

AN EVALUATION OF A MILIEU THERAPY PROGRAMME FOR SEVERELY RETARDED CHILDREN IN AN INSTITUTION

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During the past 20 years there has been increased concern with the quality of care afforded to institutionalised mental defectives (Centerwell and Centerwell, 1960; Clarke and Clarke, 1960; Gesell and Amatruda, 1947; Gunzburg and Stanley, 1961; Kaufman, 1963; Kugel and Reque, 1961; Lyle, 1959). This concern is based upon the recognition that the adjustment of the hospitalised child is influenced not only by his basic retardation, but is also significantly affected by the nature and quality of stimulation offered by his day to day living arrangement, and interactions with caretakers and peers.

McKinney and Keele (1963), in a controlled study, identified "mothering" as an essential variable affecting institutional adjustment of severe mental defectives in an institution. These authors had severely retarded children (IQ less than 30) "adopted" by older mildly retarded female patients. Under supervision, the parent substitutes were encouraged to play with "their child" and spent an average of four hours a day teaching them new words and skills and developing new interests. After four weeks, the experimental group showed a significant increase in purposefulness and verbal behaviours, and showed decreases in social behaviours and randomness. Likewise, Rheingold (1956) found greater social responsiveness in normal institutionalised infants switched to one caretaker as contrasted to a control group which continued to relate to multiple caretakers.

The purpose of this report is to present the results of a pilot and clinical programme which attempted to modify various aspects of the traditional institutional approach to the care of severe mental defectives. This was accomplished by establishing a specific therapeutic milieu. The latter took cognizance of three essential variables delineated by Redl (1959) which included (a) the nature of the social structure of the hospital or ward and its communication network; (b) the individuality of the patients within the context of ongoing group processes; and (c) space, equipment, time and props.

Objective assessment of the effectiveness of the programme was achieved by comparing behavioural changes in the experimental therapeutic milieu group and a control group.

METHOD

A total of 60 children made up the original therapeutic milieu group and 16 were randomly selected for more intensive study. For comparison purposes a control group of 16 children, matched on diagnosis, age and degree of intellectual impairment, were selected from another institution offering a rather typical American resi-

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dential programme for mental defectives. The age range for both groups was five to nine years. The diagnostic categories included mongolism, organic brain syndrome, phenylketonuria, chromosomal anomalies, cerebral atrophy and primary infantile autism. Reliable numerical measurements of intelligence were possible for less than half the group. In those children in whom the administration of standardized psychological tests were feasible, IQ's fell below 35. The majority of the children were not completely toilet trained. Some selffeeding existed, although belt restraint to the dining room chairs and assistance in management of a spoon was frequent.

I. Experimental Group-Therapeutic Milieu

The first step in introducing this programme was the construction of a play living-room within the large existing dayroom, in order to reduce unstructured visual and acoustic stimulation for both patients and ward personnel. This room was used to foster the establishment of small patient groups which functioned as "artificial sibling groups." Once established in the living room, these peer groups also functioned as a unit in the general ward area, the dining room and in other programme areas. The purpose of the grouping was to provide for more cohesive and consistent interactional patterns between these children. The groups consisted of three to five children.

The ward aides, designated as group mothers, were consistently assigned to their groups and functioned in this manner throughout the working day. This arrangement provided for the opportunity to establish stable interaction patterns between peer groups and between the aide and child.

The basic philosophy was to provide a psychological climate for the aide to function as a mother surrogate rather than as an employee; and for the child to function as a child rather than as a patient. Nonetheless, ward logistics demanded that one aide had to function as a group mother for two or three groups.

Regular group counseling meetings for aides and nurses were held to increase communication and understanding of each child's problems and to decrease hierarchical staff distance and suspicion. This technique helped to establish the concept of an interdisciplinary aide and to encourage self-reliance and security.

The play living room and group counseling meetings were considered the primary factors in providing the children with the following: (a) mothering as an essential not only in providing basic sensory and perceptual experiences, but also in fostering emerging social responsiveness of the severely and profoundly retarded child; (b) verbal input achieved through daily and continuous vocal interaction with consistent parent figures and siblings; (c) planned sibling interaction (in contrast to random contacts) as an avenue for acquiring better social awareness and identification of self in relationship to others; (d) encouragement in areas of locomotor and manipulatory experience to foster functional motor expressiveness; (e) patterns of care (feeding, dressing, bathing, toileting) converted from mechanistic activities into meaningful developmental tasks; (f) opportunities to achieve individuality as well as identification with peers and "aide mothers."

II. Traditional Approach-Control Group

The control group was selected from another state institution for the mentally retarded with a more traditional approach to the care of the retarded. The patients in the control group spent most of their waking hours in a large dayroom. Emphasis was placed on maintaining high standards of physical care and a premium was put

on cleanliness and accident prevention. The average census of the control ward is 50 patients with two or three aides on duty during the day, with fewer personnel present at night. A number of the children participated in some form of organised off-the-ward activities, such as school or recreation; but the group spent most of its waking hours in the dayroom without organised activities, save the blare of a television set or phonograph. It is the writers' view that the control ward provided better than average care in a rather neat, clean, noisy and psychologically limited environment.

III. Method of Evaluation

Kaufman (in press) developed a method of time sampling observation consisting of 15 specific stereotyped or self-stimulating behaviours, 5 social behaviours and a single measure of manipulation of the environment. These behaviours are presented in Table 1. The stereotyped behaviours involved rhythmic repetitive activities such as body rocking, head rolling, and waving hand before the eye. Self-stimulating behaviours included slapping and poking self, arm flapping, mouthing of objects,

TABLE 1
SUMMARY OF BEHAVIOURAL OBSERVATIONS

		Traditional Group	Therapeutic Group
<i>A. Stereotyped and Self-Stimulating Behaviours</i>			
1.	Body rocking	.16	.09
2.	Head rolling or shaking	.81	.03
3.	Headbanging	.01	.00
4.	Waving hand before eye	1.60	.31
5.	Slapping, poking, rubbing, scratching self	9.38	5.57
6.	Mouthing, thumbsucking, nailbiting	5.25	2.34
7.	Facial grimacing, laughing to self	4.41	3.44
8.	Non-social vocalisations	3.13	1.75
9.	Arm flapping	.84	.41
10.	Leg swinging	2.16	1.09
11.	Restless pacing	2.34	2.09
12.	Whirling, twirling, spinning body	.00	.50
13.	Cupping hands over ears	.03	.00
14.	Smelling objects or body	.03	.00
15.	Manipulation of genitals	.00	.28
16.	Total stereotyped and self-stimulating behaviours	20.72	12.81
<i>B. Social Behaviours</i>			
1.	Notices presence of others in immediate environment	11.97	15.63
2.	Social play	1.59	3.60
3.	Aggressive social interaction	.69	1.53
4.	Use of speech and gestures to communicate	2.88	3.56
5.	Crying in response to action of others	2.94	.53
6.	Total social behaviours	18.94	24.78
<i>C. Manipulation of the Environment</i>			
1.	Actively manipulates objects in purposeful fashion**	4.38	10.00

** $p < .01$

etc. Social behaviours involved a child actively or passively reacting to the presence of another child. Manipulation of the environment indicated an activity in which the child manipulated some object in the environment in a purposeful fashion. Both therapeutic and traditional groups were observed during two time periods, once in the morning and once in the afternoon of the same day. Observation of each child was made through a one-way mirror with the children in a room 18ft. x 21ft. During each observation period the presence or absence of each behaviour (in table 1) was recorded for 25 consecutive 15 second intervals. Thus if a child exhibited a behaviour throughout the morning and afternoon sessions, his score would be 50.

Measurements were made 16 months following the formation of the therapeutic group.

Results and Discussion

The mean frequencies of each behaviour were tabulated for both groups and are found in Table 1. Group differences were evaluated by analysis of variance. The results indicate a fairly consistent trend in the direction of more social behaviours by the therapeutic group and more stereotyped and self-stimulating behaviours by the traditional group. Three reversals to the general trend are found; more whirling and genital manipulation in the therapeutic group and more crying in the traditional group. While the general trend is reasonably apparent, group differences on stereotyped and social behaviours are not statistically significant. Significant differences are obtained on the amount of manipulation of the environment, with the therapeutic group engaging in a greater amount of manipulation of the environment than the controls ($F_{1,30} = 18.62, p < .01$).

This programme was developed to counteract the negative effects of traditional institutional care for the retarded discussed earlier and demonstrated in a recent study by one of the authors (Kaufman, in press). In the latter it was found that institutionalised children exhibited more stereotyped and self-stimulating behaviours and fewer social behaviours than a control group of children living at home but awaiting institutional placement.

In the present study, the clearest finding is greater manipulation of the environment by the therapeutic milieu group than the control group. The trend of the results further suggest that some of the negative effects associated with mental defectives residing in institutions (stereotyping and self-stimulating behaviours), may be modified and reduced in a therapeutic milieu with a concomitant increase in social behaviours. The trends described above need to be qualified in light of the fact that the stereotyping and social behavioural trends did not reach statistical significance and it is suggested that cross-validation is necessary.

It is our conclusion that more attention to the psychological needs of the child and more effort in developing the latent talents of ward staff are factors contributing to constructive institutional change.

ACKNOWLEDGMENTS

This research was supported in part by Research Grant MH 08108-01A1, National Institute of Mental Health.

The authors wish to acknowledge the assistance of Mr. Harvey A. Stevens, Superintendent and the Research Department of Central Wisconsin Colony and Training School, Madison, Wisconsin, U.S.A.

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