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MODES OF REVERBERATED BEHAVIOUR POTENTIALS OF HANDICAPPED CHILDREN[1]

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A child learns in his family environment the basic aspects of social relations, while interacting with different family members. In course of development he retains in his memory repertoire a pool of unshared information which affects his social relations in family circle. Thus a child is assessed by his family members in terms of how he maintains relation and express his behaviour under different family circumstances. Some significant memory impressions of a child constitute the properties of his psychological field and governs his motives and attitudes for interacting with associated figures in a social field. In order to know the dynamics of those properties of psychological field of a child in a given moment of interaction an understanding of the said impressions is essential. An attempt has been made in the present investigation to explore the modes of unshared information of a group of physically handicapped children by reverberating the past impressions as suggested by Cohen (1970) using the "projected molar behaviour analysis" method. One hundred middle class Bengalee handicapped children were divided into five groups on the basis of social behaviour peculiarities, reported by their parents, deserving clinician's attention. The psychodynamics of the said reported behaviour peculiarities were studied here by a projective method developed by the authors following theoretical assumptions of some reputed senior psychologists. The findings highlighted the modes of reverberated behaviour potentials which could be considered as the unshared information of these children and admitted as motivators of their reported social behaviours in family milieu. The findings spoke in favour of the efficacy of the method for studying the unexplored cognitive frames of reference of the children for clientele purpose.

The pool of unshared information builds up an individual's private world. The more a child attains social maturity the more he learns the value of privacy or secrecy in social life. While interacting in different social scenes and situations, a child develops his capacity to think silently, converse privately with self alone, and learns the advantages of secrecy during later phase of childhood—partly from fear of punishment and partly from the feeling of shame or guilt. The growing children, thus, create in secret a marvellous phantasy world of their own—with typical needs, goals, barriers, modus operandi for achieving goals. The constituents of their phantasy world are largely perceptual facts which remain stored up in their memory repertoire as unshared information. It may be assumed that while interacting with different nurturant figures, siblings, and others who share with psychological group life of the family, every child retains apperceived images of interacting individuals in terms of their respective behaviour characteristics. Further, these apperceived impressions, as proper-

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ties of the psychological fields (Krech & Crutchfield, 1948) of the child, governs the child's social relations with them in relevant social situations of family life. In order to understand the immediate dynamics of a child's social behaviour in relation to family members and associates a probe in the child's unshared information about different family members seems to be profitable. This probing is possible by phenomenological analysis and for which the child's previous experiences, when he formed impressions, must be " reverberated " (Cohen, 1970). An attempt has been made in the present investigation to use " projected molar behaviour analysis "[2]; which has been developed and tried earlier as a method for " reverberation " by the present investigators (Bose & Bhattacharyya, 1969; Bose & Biswas, 1972; Bhattacharyya, 1976), after the theoretical construct to study the immediate dynamics of social behaviour in terms of " molar behaviour unit " (Tolman, 1932; Lewin, 1936; Muenzinger, 1942; Krech & Crutchfield, 1948).[3]

Procedure

Device for collecting projected molar behaviour data. The Children's Apperception Test Cards were re-drawn by substituting human figures in the pictures, in lieu of animals, and selected as standard stimuli, after adaptation, for eliciting the unshared family relation information of the children population, in their projected responses[4], on the grounds stated below:

(a) Suitability of the themes in the Test Cards for easy perception of the children of age group 5–10 years (Bellak & Bellak, 1949).

(b) The possibility, in the pictures of ten test cards, for eliciting different family life episodes, indicating the past of a present happening and its future consequences or in terms of a past-present-future complex[4]; when the responder can act as a " casual observer " bearing no direct involvement with the episodes narrated by him.

(c) The advantage of carrying on content analysis, of the projected episodes without fol-

[2] Projected molar behaviour: Description of molar behaviour of an individual, narrated by him in response to a picturised Social situation. Like Murray's thema (Murray, 1938) these pictures help to stimulate the memory-repertoire of the observer for eliciting responses in the form of meaningfully described happenings of social life through which the individual's behaviour determinants of that moment are expected to be projected. Projected molar behaviour analysis method rests on the rationale that " from small samples of behaviour the clinician attempts to predict how a person with respective individuality is going to behave in future. The intellectual pleasure this activity affords is tempered with the knowledge and clinical insight and thus made the decisions vitality important " (McGargee, 1966).

[3] Molar behaviour: An unit of analysing an individual's motive, involving his needs and goals for behaving in any unified social episode with a beginning and an end, to record and measure dynamics of the properties of the individual's Psychological field at several short, successive stages in time—depicting picture of immediate psychological field (Krech & Crutchfield, 1948). It includes the main constituents of a meaningfully organised behaviour of the individual, occuring at the same time.

[4] The findings of a pilot study justified the fact that the ten camouflage social scenes, in ten test cards, were really capable eliciting 24 different types of social scenes covering almost all common incidents of daily life of the population concerned where the contents of the episodes were constituted with parents, siblings, different family members and friends and common visitors, as dramatis personae of different interpersonal events with respective bearings in the immediate dynamics of social behaviour of the child concerned; as the " main figure " in the episode who was found to get himself involved in the projected story either as " hero " or as " casual observer ". The ranking for the social scenes for each card being treated statistically revealed such co-efficient of correlations on the basis of which it could be said that the social scenes described by the children were not intercorrelated —revealed the absence of any close association amongst them.

lowing any psychoanalytical formalities[5] and by means of identifying the main features in the story contents and drawing inferences on the main constituents of the immediate dynamics of social behaviour in terms of the following selected items: Main features—(i) Main figure, (ii) Action-character of the main figure, (iii) Nature of main figure, (iv) Secondary figure, (v) Action-character of secondary figure, (vi) Nature of secondary figure, (vii) Social scene expressed, (viii) Self-involvement in the episode and (ix) Overall character of the episode.

Immediate social behaviour dynamics of the " main figure " indicating his—(i) Need and demand, (ii) Tension generating factors, (iii) Reality barriers, (iv) Tension reducing mechanism and (v) the Fate, in terms of goal achieved or not achieved.

(d) Feasibility of scoring the content analysis items, as stated under (c) above, has added one most important point in its favour. The scoring rationale was developed on the premise of " functional selectivity of cognitive field " (Krech & Crutchfield, 1948)[6].

(e) Scoring procedure: Each of the episode contents were analysed to find out the items stated under (c) above. As a result, from each story only one prominent feature was detected for every item—when and where available. This gave birth to the possibility of getting any itemised feature with minimum one and maximum ten frequencies and, thereby, calculating any feature in terms of percentages within a range 10% to 100%. For example, while narrating ten different episodes, a child may project a " father " in different family-life situations as " main figure " of the episode with " action-character " as " punishing " with " hypercritical nature " and the said " hypercritical, punishing, father figure " may be projected as the main " reality barrier " to achieve any " goal " of the narrator child as " casual observer ", who may be found to adapt any selected " modus operandi " for his " tension reduction " in one episode only or two, three, . . . maximum in ten episodes. So, in this case the more a particular itemised feature is reported frequently the more its significance in perceptual frame is expected to be increased. Resting on the said rationale for quantifying the " projected molar behaviour " data, by content analysis, the following qualifying terms were used to indicate corresponding percentage values: Highly insignificant (upto 20%); Insignificant (upto 40%); Significant (upto 60%); Fairly significant (upto 80%); and Highly significant (80% and above).

Sample. Altogether 100 orthopaedically handicapped male children were selected from the out-patient department of a Calcutta Hospital for the crippled children and Rehabilitation Centre, as they attended the department for therapeutic advice during a period of one year, under the auspices of which the present investigation was practically encouraged[7].

[5] It may be assumed that the coping behaviour of an individual for a given moment includes the immediate present only; which is merely an extension of what existed a moment before and is itself the immediate antecedent of what will exist a movement later and its psychodynamics may be understood by studying the nature of the situation at that moment and in its synamics. The projected molar behaviour analysis of one's social behaviour, however, is not limited to the methods of the Freudian or of the biocentric psychologist. " We can treat all motives as contemporaneous with respect to their biological foundation or their genesis in the past experiences of the individual ". (Krech & Crutchfield, 1948).

[6] " No one perceives everything that is out there to be perceived but that only certain objects play a major role in one's perceptual organization. The objects thus accentuated in perceptual organizations are usually those which are functionally significant to the perceiving individual . . . of his needs, mental sets, and modes in selecting objects for perceptual organization. The effects of the individual's culture on his cognitive organization, and of the physical distribution of the objects are also discussed . . . the data (concerned) do not have a logic of their own which results in the same perceptions and cognitions for all people ". (Perceiving the world, proposition II, Krech & Crutchfield, 1948).

Besides the " projected molar behaviour " data, information about each child were also collected in order to provide an idea of relevant general background along with his social behaviour peculiarities, and Intelligence and Social maturity gradings.

Data processing. Though data were collected to describe each of these children individually, for clientele purpose, for the present paper the main " modes " (Linton, 1945) were picked up to depict those characteristics of the population, which remained present on or above 60% level, who were usually and logically found living in more or less same physical and societal environment. The said " modes " (Erikson, 1950 ; Inkels & Levinson, 1954) of a group may be utilised also to study the efficacy of a planned programme of " social learning " (Murphy, 1954) to change behavioural peculiarities, by bringing a change in the pool of unshared information kept in the cognitive field of the individuals concerned[8].

Interpretation of Results

The data collected for each of these 100 physically handicapped children were processed first to describe an individual case, in the manner given below:

Case No. Ph/1

I. C.G., 6 years, 6th and last child, Hindu, male, no formal school training, had no history of eventful birth. Had a history of concussion at the age of two years, followed by high traumatic fever, and a gradual disability for wasting of left side. Lives in a family of nine members depending upon low income of father. Parents described him as a restless daredevil type, and disinterested in school programme. Adapted Stanford Binet score indicated him within the " average " grade and adapted Vineland Social Maturity Scale appraised him as " slight below " the expected age-norm of social maturity.

II. Placing himself as a casual observer, the child depicted successfully his projections in most of the stories, with relevance. Content analysis of the projected molar behaviour data revealed the presence of the following, significantly, in the child's cognitive frame of reference, as unshared information:

(a) A critical mother/parents figure interacting with a misunderstood child, a victim of punishment, (70%) with " free expression of self (autonomy) and leadership in peer life " needs with reference to leadership in peer life and adventure (60%).

(b) The projected modus operandi for goal achievement revealed the child's inclination in overcoming the reality barriers (concerning critical attitude of the family members vis-a-vis the child's personal limitations in 80% level) by deception begging sympathy (attention-getting mechanism in 70% level).

III. The unshared information, as revealed in the projected data, revealed the dominant need and

[7] The Director of Rehabilitation provided all the facilities to conduct the present investigation. The authorities concerned were interested to get a workable device for understanding the causes of social behaviour problems of the handicapped children to cope with family and community life, which seem to affect the progress of rehabilitational therapy programme prescribed for the respective children.

[8] The authors had an idea to compare the data with other criterion group and also to appraise changes sequence following the children's regular participation in different activity-centered therapy programme, as a day scholar, in the school of Rehabilitation run by the institution.

TABLE 1

Background information of the children

($N=100$)

Birth order	f	Family members	f	Father's income (annual ceiling)	f
First child	29	3- 5 Members	36	Rs. 5000-6000	61
Middle child	49	6- 8 Members	51	Rs. 6001-7000	29
Last child	22	9-11 Members	13	Rs. 7001-8000	10

Different gradings					
Intelligence (Stanford-Binet)	f	Social maturity (Vineland scale)	f	School	f
Borderline	3	Below age norm	51	Preparatory	25
Backward	35	Within age norm	40	Primary	60
Average	62	Above age norm	9	(not admitted)	15

preferred modus operandi for achieving goal by overcoming the reality barriers in the family environment of the child.

The child's reported problematic social behaviour is a defensive expression. The parents be counselled accordingly to understand the dominant need of the child; he is not naughty and unruly by nature. In the context of overcoming the family's limitations to pay adequate attention to the child's healthy socialization the parents may approach to the authorities of the Rehabilitation Centre for admission to live " institutionalised life " for a prescribed period.

Following the above treatment in interpreting data for respective cases, the data pool was processed further to identify the modal peculiarities of the background information of the population and with the unshared information, as projected in the 1000 episodes by the hundred cases concerned.

Background information. The experimental group consisted of 100 physically handicapped children belonged to age range 6–10 years and middle class Bengalee families living in and around Calcutta. They attended the out-patient department of a Calcutta Hospital and Rehabilitation Centre in different dates of a calender year for treatment. Their birth orders and family structure vis-a-vis father's income (Table 1) revealed the imperative picture of stresses and strains, of typical middle economic class Bengalee families for financial limitations of parents, to rear up children requiring special educational facilities for their handicapped conditions. Through the data (Table 1) it became evident that there was some " borderline " and " below age-norm " in social maturity in the group, but the children who received low score in Vineland scale became so appraised due to their obvious physical limitation under sequale of a disease, acquired after birth, causing problems in uninterfered locomotion, communication, and self-care, as deservable in the age group concerned. The parents could not manage to sent their respective child in school in 15 cases. In five cases the school authorities regretted their inabilities to provide special care and attention and in ten cases there was negligence on the part of the guardians in attaching importance on the child's school life simultaneously with treatment.

Social behaviour peculiarities. The parents of these children, during clinical interview, reported the behavioural peculiarities which often appeared to them and others

TABLE 2

Groupings on the basis of social behaviour peculiarities (as observed by parents)

Group number	Three adjectives selected to indicate typical behaviour pattern of a child	Total No. of cases for a group
I	Shaky, shy and timid	40-Children
II	Lazy, indifferent and passive	25-Children
III	†Whimsical, obstinate and hostile	20-Children
IV	Intelligent, introvert, snoopy	10-Children
V	Restless, quarrelisome, aggressive	5-Children

† Molar behaviour data of one such child was found not analysable.

TABLE 3

Modes of social scenes in the projected episodes

($N=1000$)

Social scene in projected episodes	f	Social scene in projected episodes	f
Incidents that took place at the time food-taking in a family in different hours.	215	Family emergency	20
Different types of competitive activities with siblings, peers, and juniors.	186	Bathing scene	20
Punishment given by elders	170	Ovation	19
Hours of relaxation (Pastime, leisure, etc.) in drawing room of the seniors, mainly.	115	Household activity	15
Disputes between parents centering round a child.	81	Shopping	14
Bedroom scene (lone life, waiting for mother, long confinement).	57	Mischief making	13
Nursing	29	Festival	13
		Waiting	12
		Quarreling	10
		Adventures	8
		Studyroom scene	3
		†(mere object naming)	1

† not considered for content analysis.

in the family as unhealthy for future social life and undesirable for effective psycho-social adjustment in family life. The peculiarities were seriously studied and made reportable in terms of three combined adjectives, with the approval of the parents concerned, to express a typical pattern of social behaviour of a particular child. In terms of the said typical pattern the population of children was divided into five different groups (Table 2).

Projected molar behaviour data (content analysis). The source for the availability of unshared information, unearthing the covert frames of reference of these children, was the projected episode-contents depicting different family life incidents—which could be interpreted in terms of molar behaviour analysis, described under procedure. Accordingly, 1000 projected episodes were collected from 100 children with acquired orthopaedic conditions. The modal peculiarities of these projected social scenes (Table 3) would speak of the vast interactional psycho-social field from which they retained impressions for developing the pool of unshared information, as motivators of their respective social behaviours in family life.

As described by the parents, the experimental group of 100 children were divided into five groups in terms of their social behaviour peculiarities in family life (Table 2), mainly. The experimental

TABLE 4

Modes of reverberated behaviour potentials for five behaviour groups (consolidated from 99 cases, synopsis exemplified)

Group and number of children	Hero and his circumstances	Unfulfilled needs of the hero	Perceived barriers & goal achievement procedures
Gr. I $N=40$	Daily routine activities of a child under the care of a dominant and over-protective mother.	Mother's love and affectionate handling; and sympathetic behaviour of other family members.	Undue vigilance and underestimation of all family members against which the child adjusts by way of rationalization.
Gr. II $N=25$	Certain obvious consequences of a helpless child in the midst of avoidance and indifference of siblings, peers, and visitors	Self-approbation, congenial sibling relations and recognition of role status in family life and assembly.	A generalised avoidance reaction of everybody, except parents, against which the child copes by withdrawal and autistic thinking.
Gr. III $N=19$	A misunderstood child, a victim of punishment, in the midst of family group.	Free expression of self (autonomy), and leadership in peer life; and adventure.	Personal limitations and misfortunes against which the child copes by tactful solution (deception and begging sympathy of elders)
Gr. IV $N=10$	An apprehensive child is winning others' heart by personal qualities.	Social competency in all aspects of family life, as expected by parents.	His social life liabilities is counteracted by obsessive apprehension and by day dreaming.
Gr. V $N=5$	A powerful child is protecting siblings and friends from dangers and punishments.	Physical strength and vigours like his friends and brothers.	His recognition as a scapegoat and his wrong family image is defended by becoming furious & aggressive.

Note. It is assumed that each respondent child as a "casual observer" projected him as the "hero". Modes represent those items which were present in child's response-pool at least 60% level, firstly, and then in the total number of children of a particular behaviour group.

group described almost all possible interactional fields of their daily family life through 1000 projected social episodes (Table 3). After the main premise of present investigation logistic, it remains implied that in a social situation a child behaves expressing his individuality being guided by his own way of thinking to cope with that he had learnt, in the context of his own limitation (personal and environmental), out of similar or almost alike interactions of daily life. It remain implied also that these learnings of the past constitute the properties of his immediate psychological field that operates, when "reverberated" (Cohen, 1970), remaining mostly as unidentified and unshared information. The dynamics as explored through content analysis of projected molar behaviour data revealed five concomitant modes of unshared information or "reverberated behaviour potentials", as described below (Table 4).

On the basis of the modes of reverberated behaviour potentials (Table 4) an attempt could be made to counsel parents to provide the child concerned facilities for participation in group activities under expert's supervision in the Rehabilitation Centre or alike institution. Their attentions could be drawn in regard to their active effort to improve family environment so that the child concerned can get adequate opportunities to fulfil needs and be able to share more of his unshared information to somebody in the family or

to any of his contemporaries by taking him/her into confidence. The said newly established relations would contribute to alter the uncongenial character of the child's relations with the family members and, thereby, the reported character of the child's social behaviour problems of family life and future social life.

Summary and Conclusion

The pool of unshared information of 100 physically handicapped children provided helpful clues to understand the inner motives in terms of reverberated behaviour potentials (Table 4) that seemed to shape their social behaviour problems in family life. The projected molar behaviour data of these children and the content-analysis procedure followed here could be utilised for future investigation, after further try-out verification.

The logical implications that were disclosed in the Table 4 data threw lights about some possible family circumstances and uncongenial interaction patterns that seemed to bear influencing relations with the five social behaviour groups, respectively. The validity of such implications can be testified by further follow-up studies regarding alterations of social behaviour patterns of the children concerned, if possible, by placing them in a controlled environment—that would fulfil the needs, by removing the perceived barriers and, thus, would cause a change in the goal achievement procedure of the children concerned. By same method, a comparative study of the unshared information modes of siblings population (who are free of any handicap condition) of these 100 children, is expected to reveal how far the present findings depicted the reality of family environment of these children, truly. Testification of the said reliability value of the present modes of reverberated behaviour potentials (Table 4) remained beyond the purview of present investigation.

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