NON-INTELLECTUAL FACTORS IN LEARNING DISABILITY

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SUMMARY

100 cases of learning disability are investigated to study non-intellectual factors associated with it. The study reveals that urban area, middle class, unitary and small family show high incidence. Impaired relationship with the parents is the most significant factor, followed by adverse influences in school. The findings are discussed.

The commonest problem of children for referral to department of Psychiatry and child guidance clinic, today, is academic difficulty experienced by children at school. This fact itself, suggests the need for intensive study of the meaningfulness of the schooling experience, the way in which it affects the child and the influence of the child's capacity and personality on the learning process. In spite of such vital importance, surprisingly, there is paucity of comprehensive studies in this field.

It is assumed that causation of learning difficulties is multifactorial and complex. Because the process by which learning is achieved, involves a wide range of factors such as intellectual, personal, emotional and environmental. All these factors work in an integrated manner and impairment of learning may result from distorted interaction of these factors.

In earlier studies, Liss (1937) pointed out role of emotional factors in learning process. The psychoanalytic literature involves primarily theoretical formulation. Pearson (1952), Robinovitch (1959), and Gardener et al. (1974) have contributed to theoretical as well as clinical aspects. In India, Bapna and Ramanujam (1976) have reported a clinical study emphasising parent-child relationship. The present study is an attempt to investigate non-intellectual factors in learning difficulties.

MATERIAL AND METHOD

The present work is a prospective study of 100 cases of learning disability, attending the Psychiatric Out-patient Department, Medical College and S. S. G. Hospital, Baroda, during the period from July 1974 to December 1978. The criteria of selection was absence of mental retardation, sensory difficulties, epilepsy, brain injury and any other organic pathology.

The cases were subjected to detailed psychiatric, psychological and educational investigations. All these children and their parents were interviewed intensively. Kamat's Test of Intelligence and Bhatia's Battery of Performance Tests of Intelligence were administered to these cases. C. A. T. and T. A. T. were given, whenever psycho-pathology could not be formulated on clinical examination alone.

Socio-economic status scales of Kuppu-swamy (1962) and Pareck and Trivedi (1964) were employed in urban and rural cases respectively to determine social class.

RESULTS

There were 71 boys and 29 girls in the age-range of 4—15 yrs. with mean age of 10.1 yrs. They were students of classes from K. G. to 10th standards. Majority of cases belonged to urban area (89), unitary family (57), small family (67),

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and middle class (42). Birth position of these cases indicated 46 eldest, 26 youngest, 23 intermediate and 5 only children. These cases were referred by parents (54), relatives (20), school (17) and physician (9).

The mean I.Q. of these cases is 104.9 within range of 75-135 I.Q. score. Majority of these cases are of average intelligence and 8 cases have above average intelligence (Table I).

**TABLE I—General Characteristics (N=100)**

| AGE (IN YEARS) | No/% |
|----------------|------|
| 4–6            | 22   |
| 7–9            | 14   |
| 10–12          | 32   |
| 13–15          | 32   |

Mean Age—10.1 Yrs.

**INTELLIGENCE**

| I. Q. SCORE | No/% |
|-------------|------|
| 75–85       | 19   |
| 86–95       | 44   |
| 96–105      | 23   |
| 106–115     | 6    |
| 116–125     | 6    |
| 126–135     | 2    |

Mean I.Q.—104.9

**SOCIOECONOMIC STATUS**

| No/| |
|---|--|
| I  | 7  |
| II | 26 |
| III| 42 |
| IV | 25 |
| V  | —  |

**EDUCATION STANDARD**

| No/| |
|---|--|
| K.G.| 7 |
| 1–4 | 36 |
| 5–7 | 37 |
| 8–10| 40 |

Adverse factors operating in the family and school are summarized in Table II. Disturbed relationship with father (73), with mother (44), marital disharmony in parents (30), adverse comparison with siblings (31), fear of teacher (25) and examination (20), battering by parents (33) and teacher (19), appear to be important factors.

**TABLE II—Adverse factors operating in family and school**

**A—FAMILY**

| I—Impaired Relationship with Parents (N=81) |
|---|---|
| 1. Impaired Relationship with both parents | 26 |
| 2. Impaired Relationship with either parent | 45 |
| 3. Impaired Relationship with father | 73 |
| 4. Impaired Relationship with mother | 44 |

**B—OTHER FACTORS PERTAINING TO THE FAMILY:**

| 1. Over protection by grand parents | 15 |
| 2. Rejection by grand parents | 4 |
| 3. Marital Disharmony in parents | 30 |
| 4. Adverse Comparison with siblings | 34 |
| 5. High expectations from the child | 24 |
| 6. Fear of mental retardation in the child | 39 |
| 7. Mental Illness in father | 6 |
| 8. Mental illness in mother | 11 |

**C. BATTERING** (N=51)

| 1. By parents | 33 |
| 2. By elder siblings | 8 |
| 3. By other relatives | 6 |
| 4. By Teacher | 19 |

The statistical analysis of parental attitudes is given in Table III, comparing attitudes of father and mother towards the child. Differences in attitudes of acceptance, uninterestedness and rejection are significant at 0.001 and 0.01 levels, while of overprotection is not significant.

Parental loss is seen in 6 cases. Loss of father by death is in 3 cases while by separation in 2 cases. Loss of mother by death is in 1 case. There are 2 cases from broken home.
TABLE III—Parental Attitudes

| Description                  | Father (N=95) | Mother (N=99) |
|-----------------------------|--------------|--------------|
| Acceptance                  | 22           | 55           |
| (X²=21.24, d.f.=1, p<0.001) |              |              |
| Uninterested, Unattached,   | 24           | 5            |
| Passive                     | (X²=15.62, d.f.=1, p<0.001) |              |
| Over-protection, overindulgence | 12           | 21           |
| (X²=254, d.f.=1, p<0.05)    |              |              |
| Rejection Punitive, Hostile | 37           | 18           |
| (X²=10.29, d.f.=1, p<0.01)  |              |              |
| Absence                     | 5            | 1            |

The prominent associated undesirable symptoms discovered in these children were aggressive behaviour (29), obstinancy (28), enuresis (19) and anxiety (17). (Table IV).

TABLE IV—Associated Symptoms

| SYMPTOM                   | (N=84) No. |
|---------------------------|------------|
| Aggressive Behavior       | 29         |
| Obstination               | 28         |
| Enuresis                  | 19         |
| Anxiety                   | 17         |
| Timidity and shyness      | 12         |
| Truancy                   | 12         |
| Hysterical Reaction       | 10         |
| Stealing                  | 8          |
| Vomiting                  | 15         |
| Thumbsucking              | 1          |
| Tics                      | 1          |

DISCUSSION

Preponderance of boys (71%) over girls in this study indicates culturally determined roles of sexes. Education was considered by parents as requirement for job in boys and for marriage in girls. This marked preponderance of boys in learning disability is reported by other investigators also (Gardener et al., 1974; Bapna and Ramanujam, 1976). One theoretical formulation to explain this pattern “Presumed slower neurological maturation in boys” does not appear to be satisfactory. Because from this sample many boys were taken for psychotherapy and they showed improvement within 1 to 3 months. Another theoretical explanation “greater achievement pressure on boys” seems to be more appropriate.

The present problem seems to be an essentially urban, middle class phenomena as these units give great importance to education. 89% cases are from urban area. 42% cases belong to middle class. There is not a single case from class V. This is particularly significant as large number of our clinical population is from this class. The Judge Baker Guidance Centre study (1960), as reported by Gardener and Sperry, also shows absence of lowest social class and more representation from the middle and lower middle class, in their analysis of 26 cases.

Language and religion do not show any significance as these cases represent general population of the area.

Unitary family and small family seem to be more vulnerable. 57% cases are from sanitary family. Unitary family has no one to share their problems and children become easy prey to faulty parental attitudes. In joint family due to collective upbringing these ill effects may be nullified. Bapna and Ramanujam (1976) in their study of 30 cases find more cases from unitary family.

67% cases belong to small family. In small family there is more emotional involvement with the child and no compensation from success of other children. Many of such cases are only sons.

There is more representation of eldest children (46%). Because parents generally place high hopes and a great deal of idealism over the eldest child. The mean I. Q. of these cases is 107.9. There are more cases (44%) from 86—95 I. Q. score. Since ambitious parents were expecting excellent
performance from children of just average intelligence and some parents were fearing mental retardation in the child, this group is most affected. These are the risk children. 19 cases with 75—85 I. Q. score are included in this study, as these cases were showing marked emotional disturbance on the I. Q. test and it was felt that these children were of normal intelligence.

The most significant factor revealed in this study is impaired parent-child relationship in these cases as 81% cases show it. 36% cases have impaired relationship with both parents while 45% cases have it with either of the parents. Impaired relationship with father (73%) is significantly higher than with mother (44%). Number of rejecting fathers (37%) is more than those of mothers (18%). Uninterested fathers (24%) out-number uninterested mothers (5%). Loss of father (5%) is higher than loss of mother (1%).

These differences in parental attitudes are statistically significant except in over-protective category (Table III).

This pattern of parent-child relationship appears to be due to traditional authoritarian role of father in our patriarchal society and expected role of mother in child-rearing. 14% mothers are working women, representing all types of jobs. But these mothers also showed the same closeness with the child.

Most of these fathers with disturbed relationship, thought that child rearing is not their job. Many fathers were busy with their work and had no time for the child, while some fathers had their own problems. Some fathers in joint and large family had the impression that the children were looked after by other members of the family.

Mothers with disturbed relationship were characterised by marital disharmony, ill-treatment by in-laws and dissatisfaction with husband's status.

Some of these cases were pampered in the beginning. But when family saw their poor school performance they were rejected. Fathers were expecting more from sons. In the cases rejected by fathers, 82% are sons. Mothers demonstrated more disappointment if they had more daughters or no son.

This lack of close relationship with the father is also reported by Bapna and Ramanujam (1976). Apart from parents, grand-parents and elder siblings also play significant part in child's life as parental roles are many times taken by them. 19% cases show disturbed relationship with grandparents. Marital disharmony in parents was seen in 30% cases. 31% cases were affected by adverse comparison with bright sibling.

High expectations from the child (24% cases) is another factor operating in the family. Some children are very anxious as standards are set by their parents and this anxiety has an inhibiting effect on learning. On the other hand due to poor scholastic performance some parents feared mental retardation in the child (39%) cases and this was hampering child's progress.

Low incidence of broken home, parental loss and parental mental illness in the study indicates that the present problem occurs more due to parental confrontation with the child than due to parental neglect, inattention or absence.

Another revealing finding in the study is that next to parent-child relationship, unfavourable school influences play significant role in learning disability. 57% cases show impaired relationship in school. Fear of teacher (25% cases) and fear of examination (20% cases) are prominent adverse school influences. Frequent change of schools had affected 26% cases. Some parents were trying new schools to improve the child. But this was causing more anxiety and lack of confidence in child. A few children developed learning diffi-
culties after joining a better school as they could not cope up with high standard of the new school. 16% cases were promoted to higher classes in spite of their poor performance in examination. These children found difficulty in learning as their basic knowledge was inadequate.

17% cases were normal children who developed learning difficulties and other problems such as enuresis, functional fits stammering etc. as a result of traumatic experiences in the school. Other children already had disturbed family relationship and unfavourable school experiences seemed to aggravate their problems.

The study does not reveal any case of school phobia. This finding substantiates the impression of some western workers that learning disability child is rarely a school phobic child.

Since coercion was the method of choice in handling these cases, number of battered cases is high (51%). There seems to be widespread belief that beating will improve the child’s learning. These children were beaten by parents and other relatives as well as by teachers. It was found in all types of social classes and schools. This coercion engenders negative attitude towards study and worsens learning problem.

Learning difficulty was not the solitary problem. Many associated symptoms were present in 84% cases. There are more cases with aggressive behaviour (29%) and obstinacy (28%) as a result of counter-aggression of these children who were handled with aggressive and coercive methods. Bapna and Ramanujam (1976) also found out many associated symptoms in significantly large number of subjects. Liss (1937) reported high incidence of respiratory disorders in learning problem children seen by him. But the present study reveals none.

Considering all these findings, it seems that learning disability is more of a symptom than discrete diagnostic entity and reflects a generalized disorder. This underlying disorder may be neurotic, behavioural or emotional. But from clinical point of view and for therapeutic intervention, it is more appropriate to identify learning disability as a separate entity.

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