

THE UNIVERSITY OF MANITOBA

A STUDY OF THE RELATIONSHIP BETWEEN
MOTHERS' ACCEPTANCE AND THE LEVEL OF SOCIAL
MATURITY OF TRAINABLE MENTALLY RETARDED CHILDREN

Being a Report of a Group Research Project Submitted
in Partial Fulfillment of Requirements for the Degree
of Master of Social Work

by

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ABSTRACT

This study was designed to determine the relationship between the level of social maturity of the trainable mentally retarded child and the degree of maternal acceptance of the child. Two variables, the sex of the child and the level of the mother's academic education, were thought to have an influence on the mother's acceptance of her child and were thus investigated.

The study took place in Winnipeg between October 1966 and May 1967. Forty-two children (twenty-three boys and nineteen girls) in the age range six to twelve, enrolled in the Kinsmen School for Retarded Children were chosen by random sampling. Mothers were interviewed separately and two instruments were administered: the Vineland Social Maturity Scale and a modification of Worchel and Worchel's adaptation of the Bills-Vance-McLean behaviour rating scale.

Analysis of the data obtained indicated a correlation between the mother's acceptance of her child and the child's level of social maturity which is too low to be of statistical significance. Findings validated the assumption that girls are more accepted than boys, but boys were found to have a higher degree of social maturity. Findings did not bear out a relationship between acceptance and the level of the mother's education.

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CHAPTER I
INTRODUCTION

Prior to the twentieth century, although some schools for the mentally retarded had been established the prevailing view had it that mental deficiency was a disease; that education was of no value and that mentally retarded individuals should be kept in prisons or in homes for paupers. Thus, while some attempt to segregate mentally retarded individuals was made, there was little provision for their special education or training. It is well to remember that the pioneering founders and supporters of institutions were motivated by the desire, often inspired by religious ardour, to serve the needs of the individual mental defective. Imperceptibly at first, but then more and more conspicuously, the public and professional emphasis shifted away from the patients themselves toward a consideration of the needs of society, which was to be protected from the harm done by their presence in the community.

Around 1860, voices were heard advocating special facilities within the framework of public school instruction for school children who could not apply themselves to the prescribed curriculum. By the early twentieth century, institutions and special schools for the care and training of the mental retardate had become general: in part a

reflection of social change (as the shift from an agrarian to an industrial society progressed, the retardate was less able to be cared for at home and was less able to cope with the increasing complexities of life), and in part a reflection of the development of intelligence tests, facilitating the measurement and detection of mental retardation and stimulating important movements for planning more effectively for children in the public schools. Research on the subject was stimulated, and the chief outcome of the ferment of the early part of the twentieth century was the reorganization of the attitudes and concepts in regard to mental retardation and the establishment of more adequate provisions to meet the unique problem that retarded individuals present.

Lawrence¹ notes the constant re-orientation in thinking that has been going on for the past few decades regarding the capabilities of mental retardates to adjust in the community. He suggests four stages, making it clear that there is considerable overlap. (1) The restrictive period : it was advocated that retarded individuals be grouped in institutions and colonies both for their own and society's protection. (2) Period of social

1. E.S. Lawrence, "Social Adjustment, an area for psychological research in mental deficiency" : American Journal of Mental Deficiency, 1953-4, 58, P.500

control. While advocating an essentially humanistic attitude toward retardates, it was also the era of sterilization.

(3) Period of social adjustment - the belief that retardates are capable of or may be helped to become capable of navigating their own way in the community. (4) Period of emotional adjustment of retardates, stemming from the recognition that at the base of social adjustment is the emotional stability of the individual.

Lawrence feels that this shift in orientation reflects the confluence of several streams of thought. (a) It parallels the changes in thinking that were occurring with mentally ill patients and the growth of the mental hygiene movement. (b) It has represented the evolvement of more sophisticated thinking regarding the multi dimensional nature of intelligence and mental deficiency. (c) It has been furthered by surveys on the social adjustment of individuals discharged from institutions for the mentally defective. (d) Advances in treatment techniques - e.g. vocational rehabilitation. (e) New understandings of the positive forces within individuals which may help them to establish a healthy pattern of community living.

If one takes an I.Q. of seventy as the upper limit of retardation, then roughly 3 per cent of the population will fall into the category. There are, of course, degrees of severity: of the thirty out of 1000 whom we call retarded, twenty-six of these will be "mildly" retarded. To give some idea of the

magnitude of the social problem that retardation presents Hutt and Gibby¹ estimate that almost one per cent of the total population of the United States is so severely retarded mentally as to require some sort of special institutional care. But not all such individuals are given such special attention. In addition, "trainable" retarded children - the object of the present study, and defined as those not in need of institutional placement, but requiring extensive modification of their scholastic programme - present society with many unresolved problems.

Tizard² has made the point that "all (surveys) have revealed a much higher prevalence of subnormality than any society is known to make provision for."

For the purpose of the present study, it is important to note that any definition of mental retardation solely in terms of I.Q. or mental age begs the huge question of the retardate's social milieu. Retardation is a social and cultural problem, as well as a biological and psychological one. In our society the problem looms large - statistically, financially,

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1. M. Hutt and R.G. Gibby, The Mentally Retarded Child, Development, Education and Treatment. 2nd Edition. Allyn and Bacon, Boston, 1965. P.15.
 2. J. Tizard: "The prevalence of mental subnormality" Bulletin of the World Health Organization, 1953, 9, 423-440. Quoted in M. Hutt and R.G. Gibby, I bid.

emotionally -; in most non-European societies it is inconsequential, confined to cases of severe pathological defect who are cared for, as long as they live, with a minimum of distress or dislocation. The difference lies in culturally determined attitudes, behaviour, and criteria of social acceptability. "Even a child with a severe defect must be viewed as deficient relative to cultural standards of acceptability; the cause of his deficiency may be organic, but its magnitude is dependent upon social criteria."¹

In terms of our milieu, then, mental retardation is a genuine social problem. Jessie Bernard has provided three criteria by which this can be tested: the humanitarian criterion of whether or not any specific stress situation should be reformed is whether or not it causes actual pain or suffering; the utilitarian criterion specifies that a situation is a social problem because it imposes expenses on the rest of society, either in the form of taxes or voluntary contributions. Not the misfortune or the suffering, but its impact on others is the test here. The criterion of dysfunctionality defines social problems in the societal sense. The functioning or even survival of groups, societies, or of a culture as a whole, is the central

1. R.L. Masland, S.B. Sarason, T. Gladwin: Mental Subnormality: Biological, Psychological and Cultural Factors. Basic Books, New York, 1958. P.145.

concern here. Retardation qualifies on all three counts. The first two surely require no amplification; with regard to the third it need only be pointed out that mental retardation affects twice as many people as blindness, polio, cerebral palsy and heart disease combined.¹

Thus, the basis for social work's concern with mental retardation. On a more particular level, we are concerned with the enhancement of social functioning for the individual mental retardate. A mentally retarded child has the same emotional needs as his more felicitously endowed brother; he needs a climate of warmth and acceptance in order that he may fulfil whatever potential he may have. A parent may be forgiven for being disappointed with his mentally retarded child, but the child can only be hurt if this engenders rejection - whether conscious or unconscious. There is a real necessity for awareness of the possible effect of parental attitudes on the social and emotional development of the retarded child.

Given this, along with the fact that the child's mother is the most influential figure in the child's life, the purpose of our study was to assess the acceptance - rejection patterns of mothers toward their retarded children.

1. The President's Panel : A Proposed Program for National Action to Combat Mental Retardation. Washington : Sup't. of Documents, 1962. Quoted in Hutt & Gibby, op. cit. P. 399.

The study was conducted in metropolitan Winnipeg, Manitoba, a city of 500,000, between September 1966 and May 1967. Involved were a group of fourteen students in their final year of the M.S.W. program in the University of Manitoba School of Social Work, one of four groups studying the problem of mental retardation.

The study is concerned with the level of social maturity of the mental retardates and the mother's attitude of acceptance or rejection. Specific studies have shown that trainable mental retardates of the same I.Q. range have attained different levels of social maturity. This study is designed to fill gaps in the theoretical knowledge which can be applied in social work practice for the enhancement of the mental retardate's social functioning.

Scope and limitations: by a process of random sampling, forty two subjects out of a possible one hundred and seventy were selected; three per student. These children were in attendance at the Kinsmen School for Retarded Children in Winnipeg; were resident in greater Winnipeg; were classified as "trainable"; and were in the age range six to twelve. In order to make the sample more valid the study was limited to the mothers of these children (the rationale here being that the mother is the most influential figure in the child's life) in homes with two natural parents and with only one retarded child in the family. Excluded from consideration were father's attitude, effects of sibling

and peer-group relationships, as well as attitude of others in the community, socializing opportunities, ethnicity, religion, socio-economic status, gross physical disabilities on the part of the child, extent of professional contact with reference to the child, marital stability, father's educational level. It was recognized that at the time of administration, certain contingencies such as, for example, family conflict, might influence the mother's responses.

The following hypotheses were proposed:

- (1) In a group of trainable mentally retarded children between the ages of six and twelve years inclusive, enrolled in the Kinsmen School, there is a direct relationship between the child's level of social maturity, and the mother's acceptance of the child in the family. Rationale: the mother is the most significant influence on the child's behaviour.
- (2) There are variations in the level of the mother's acceptance of the trainable mentally retarded children, which are related to differences in the sex of the child and the mother's level of academic education. Rationale: cultural expectations for girls are lower; and better educated people are apt to be more flexible.

Two sub-hypotheses were proposed:

- (1) The level of the mothers' acceptance of the trainable

mentally-retarded girls is greater than their acceptance of the trainable mentally-retarded boys.

(2) There is a direct relationship between the mother's level of acceptance of her trainable mentally-retarded child, and her level of academic education.

Definitions:

Trainable mentally-retarded child: one who has been assessed through psychological testing as capable of training in the Kinsmen School, and who is unable to benefit from participation in the Greater Winnipeg public school system.

Social Maturity: the attainment of optimum realization in the areas of self-help, locomotion, self-direction, socialization, occupation, as indicated by the score obtained through application of the Vineland Social Maturity Scale.

Mother's Acceptance: degree of discrepancy between a mother's rating of her retarded child and the ideal child, as obtained by the application of the rating scale used in this study.

Mother's level of education: highest grade successfully completed.

Assumptions underlying the study:

The psycho-social growth-promoting needs of the trainable mentally retarded child are the same as for children who are not retarded.

The responses of the mother to the scale are a valid

indication of her true feelings.

The instruments of measurement used in the study are valid determinants of acceptance and social maturity and were administered uniformly and objectively.

The degree of discrepancy measured in the application of the instrument is an indication of the mother's acceptance-rejection pattern.

Methods: This will be more fully discussed in chapter 3. Two tests were administered to the mother, interviewed individually: the Vineland Social Maturity Scale, which measures the social adequacy of mentally-retarded children in terms of social self-sufficiency, and a modification by Worchel and Worchel of a behaviour rating scale devised by Bills, Vance and McLean. In its adapted form, the scale is designed to measure (a) the attitudes of parents toward mentally retarded children; (b) the concept of the ideal child held by parents; (c) the attitudes of parents toward most children.

We examined the discrepancy score on the behaviour rating scale, and we correlated this with the social quotient score. We expected to find that the greater the discrepancy, the lower the social quotient. Findings were classified in terms of the sex of the child and the educational level of the mother, in order to establish any correlation between acceptance and these variables.

In December, 1966, a pre-test was conducted with each of fourteen mothers. Although the Vineland Scale was administered

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seperately, the behaviour rating scale was administered on a group basis. Group testing was found to be inconvenient as well as inimical to thoughtful completion of the scale, and was discontinued in favour of individual testing. Findings of the pre-test bore out the validity of the hypotheses.

CHAPTER II

BACKGROUND

Any attempt to survey the background to the study must needs begin with some of the attempts to define mental retardation, taking into account the various dimensions to the problem discussed in the last chapter. Tredgold¹ stresses the degree of social adequacy of the person: "... a state of incomplete mental development of such a kind and degree that the individual is incapable of adapting himself to the normal environment of his fellows in such a way as to maintain existence independently of supervision, control or external support." Doll² also places emphasis on this area while Benoit³ laments the emphasis placed on the existence of a functional defect, to the exclusion of the individual's social milieu, in many definitions.

The American Association on Mental Deficiency classifies mental retardation thuswise: "mental retardation refers to

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1. A.F. Tredgold and K. Soddy, A Textbook of Mental Deficiency, 10th Edition. Baltimore, Williams and Wilkins. Quoted in M. Hutt and R.G. Gibby, op. cit.
 2. E.A. Doll, "Definition of Mental Deficiency", Training School Bulletin, 1941, 37, 163-164. Quoted in M. Hutt and R.G. Gibby, I bid.
 3. E. Benoit, "Towards a New Definition of Mental Retardation", American Journal of Mental Deficiency, 1959, 63, 559-565. Quoted in M. Hutt and R.G. Gibby, I bid.

subaverage general intellectual functioning which originates during the developmental period and is associated with impairment in one or more of the following: (1) maturation (2) learning (3) social adjustment."¹ "Subaverage" is further defined as a level of performance which is at least one standard deviation below the population mean for the age group involved. The upper age limit of the "developmental period" is regarded as being approximately sixteen years.

This classification of mental retardation utilizes two dimensions: (1) the measured intelligence, (2) adaptive behaviour of the individual. In order that a person be termed mentally retarded, it is required that he demonstrate significant deficiencies in both.

The latter dimension includes two major aspects of adjustment: (1) the degree to which the individual is able to function and maintain himself independently; (2) the degree to which he meets satisfactorily the "culturally-imposed demands of personal and social responsibility."² Further, the individual's level of adaptive behaviour is always evaluated in the light of his particular chronological age group. The Vineland Social Maturity Scale is a means of measuring adaptive behaviour.

1. R. Heber, "A Manual of Terminology and Classification in Mental Retardation", American Journal of Mental Deficiency, 1959, 64, Monograph Supplement. Quoted in M. Hutt and R.G. Gibby, I bid.

2. R. Heber, I bid.

This scale was developed in 1935 by Dr. E.A. Doll, then director of research at the Vineland Training School. His purpose was to formulate a means of measuring social adequacy in terms of a genetic age schedule, which would permit the "quantitative determination of significant degrees of deviation or change"¹ - a distinct aid to clinical psychology and psychiatry, and which would provide a basic method for investigating a wide range of problems which, in 1935, were inaccessible to study because of the lack of a satisfactory basic criterion.

The scale measures social adequacy in terms of social self-sufficiency, genetically expressed as progressive social maturation. "The scale assumes that the individual is progressively adaptive through growth in social performance as one aspect of an innate or biological growth potential - - - (however) it is obvious that the performances designed to reflect such independence must vary with other aspects of growth, development and adjustment. Consequently the actual content of the scale is based on such evidences of social independence as are reflected in self-help, locomotion, communication, occupation, self-direction and socialization."²

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1. E. Doll, "A Genetic Scale of Social Maturity", American Journal of Orthopsychiatry, 1935, 5, 180-188.
 2. E. Doll, I bid.

The scale consists of 117 items; a table converts total scores to equivalent social age values.

Masland, Sarason and Gladwin¹ note that the relationship of such tests to adult adjustment has been little explored, so we do not really know whether they will predict this or not.

The focus in the present study is on the retarded child's familial environment - with particular reference to his mother. Basic to our study is the assumption that "the subnormal individual, even the severely defective one, is influenced by and in turn influences, the familial and social milieu into which he is born and in which he develops."² Kanner³ makes the point that the study and treatment of exceptional children would be sorely incomplete if the emotional factors of family relationships were left out of the consideration.

That the presence of a mentally retarded child in a family group tends to result in disturbed emotional reactions by the parents has been well substantiated. Hutt and Gibby⁴

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1. R.L. Masland, S.B. Sarason, T. Gladwin. op.cit.
 2. R.L. Masland, S.B. Sarason, T. Gladwin. I bid.
 3. L. Kanner, "Parents' Feelings About Retarded Children", American Journal of Mental Deficiency, 1952,- 1953, 57, P. 375 - 383.
 4. M. Hutt and R.G. Gibby, op. cit. P. 292.

affirm "it may be stated categorically that all parents of mentally retarded children are likely to show some undesirable personality reactions to the fact that their child is retarded". Michaels and Schucman¹ state that "in general, the initial impact of awareness of having a retarded child brings with it a period of shock, bewilderment and disbelief. This is frequently followed by a time during which the parents vacillate between unrealistic despair and equally unrealistic hope". Cummings, Bayley and Rie², who studied the effects upon the maternal personality of children who were mentally deficient, found that the group of mothers studied clearly derived less pleasure in relating to the retarded child than in relationships with their normal children. As a result of having a retarded child, depression was noted, as well as conflict in modulating hostile feelings, at least relative to the retarded child and it seems likely with other persons as well. This seems to produce tendencies toward rejection of the retarded child at the same time as over-protection is manifested. Reduced self-esteem

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1. J. Michaels and H. Schucman, "Observations on the Psychodynamics of Parents of Retarded Children". American Journal of Mental Deficiency, 1961-62, 66, P.568-573.
 2. S.T. Cummings, H.C. Bayley, H.E. Rie, "Effects of the Child's Deficiency on the mother: A Study of Mothers of Mentally Retarded, Chronically Ill and Neurotic Children". American Journal of Orthopsychiatry, July 1966. P.595-608.

relative to the maternal role is evident. Stoddard,¹ in a study scrutinizing parental awareness and acceptance of a child's defect, and the reality level with which the parent views the present and future needs of the child, points out that the parent's personality is exposed to more trying experiences with the abnormal child than with the so-called "normal". The retarded child is frequently also the personification of the parent's interpersonal problems; "with a retarded child, the personal problems are accentuated by parental feelings of inadequacy and failure in a primitive area of living-procreation."²

Retarded children need, as do all persons, close emotional relationships with others. If the parents manifest negative personality reactions to the child's deficient abilities, then it becomes more difficult for wholesome relationships to be established. The greater the negative emotional reactions of the parents, the less likely it is that the child will achieve the level of emotional maturity he is capable of attaining.

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1. H. Stoddard, "The Relation of Parental Attitudes and Achievements of Severely Mentally Retarded Children." American Journal of Mental Deficiency, 1958-59, 63, P.575-598.
 2. H. Stoddard. I bid. P.577

Hutt and Gibby point out that there are many different ways in which a parent can react emotionally to the fact that his child is retarded. Resulting patterns of behaviour may vary from a more constructive form of adjustment (such as a realistic acceptance of the child's condition) to a more destructive and maladaptive form (as in rejection or denial). However, acceptance of the reality situation by the parent is not an all-or-none affair; a parent's reactions may fall at any point within a wide range of the total scale of adjustment possibilities. Acceptance comes about as the result of a gradual process of growth within the parent and is emotional as well as intellectual.

The accepting parent must be aware of the nature of his own emotional relationships to the retarded child. He must realize which of his own needs are threatened by the child's condition and he must be aware of the extent to which these needs determine his own behavioral reactions.

There are some general parental reactions which are encountered commonly.

(1) Distorted parental perceptions. It is not unusual to find that the parent of the retardate is unable to perceive the reality of his child's retardation. Schulman and Stern¹ conducted a study of parents' estimates of the intelligence level

1. J. Schulman and S. Stern, "Parent's estimates of the Intelligence of Retarded Children." American Journal of Mental Deficiency, 1959, 63, 696-698. Quoted in Hutt and Gibby, op. cit.

of their retarded children. They asked fifty parents to estimate the developmental age of their retarded children prior to the time that psychological tests were administered. These estimates were then compared with the obtained intelligence test scores. It was found that there was no statistically significant difference between the two mean scores; however, some parents underestimated the child's capacities to a marked degree, while others inordinately overestimated the child's intellectual level. The study would indicate that parents of retarded children, as a group, are quite aware of the disabilities of their offspring, but that there is considerable variation from one individual estimate to another.

Worchel and Worchel¹ (whose acceptance-rejection patterns held by parents toward their mentally-retarded children form the basis for the present study's rating of maternal acceptance) asked parents from 22 families with at least one retarded child to rate the child on several different variables. Results showed that the parents rated the retarded child less favourably on many personality traits than they did their normal children. Further, the retarded child was seen as deviating more from

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1. T. Worchel and P. Worchel, "The Parental Concept of the Mentally Retarded Child." American Journal of Mental Deficiency, 1960-61, 65. P.782-788. Quoted in M. Hutt and R.G. Gibby, op. cit.

the concept of an ideal child than was the non-retarded one. Worchel and Worchel interpret their findings as indicating that there is a greater degree of parental rejection of the retarded child than there is in the case of the more average child.

Caldwell and Guze¹ note that the situation is further complicated by the fact that other children readily adopt the attitudes and feelings of the parents toward the mentally retarded child. In a study concerned with investigating the adjustment difficulties of the parents and siblings of institutionalized and non-institutionalized retardates, they found that, without exception, the siblings of retardates mirrored the attitudes of their parents, and that they moulded their value systems so as to conform to the family status quo. This is another reason why it is so important that the parent perceive realistically the assets and liabilities of his retarded child.

(2) Rejection. It is likely that the emotional maladjustment of the parent is reflected in his behaviour toward the retarded child. In many instances, this behaviour is essentially

1. B. Caldwell and S. Guze, "A Study of the Adjustment of Parents and Siblings of Institutionalized and Non-Institutionalized Retarded Children." American Journal of Mental Deficiency. 1960, 64, 845-861.
Quoted in M. Hutt and R.G. Gibby, op.cit.

rejecting in nature. Fried¹ feels that the parent tries to adopt patterns of rigid and persistent discipline and training because he feels that such actions will help the child. He cannot see how this blocks off the possible fantasy life of the child, and leads to the consequent development of severe emotional disturbances in him.

(3) Marital Discord. Marital difficulties often arise due to parental anxieties. Each parent may displace some of the feelings toward the child on each other. As well, the father may resent the fact that his wife pays more attention to the child than she does to him.

(4) Narcissistic Involvements. Every parent tends to see his child as an extension of himself. Thus any blow to the child, any shortcoming, failure, or censure by other individuals is perceived by the parent as a blow to his own narcissistic pride. When the child is diagnosed as mentally retarded, then such a parent feels that he himself is being slighted.

(5) Dependency Reactions. In some instances the parent may be a dependent person who leans heavily for emotional support upon other individuals. The retarded child, needing as he does

1. A. Fried, "A Report of Four Years Work at The Guidance Clinic for Retarded Children, Essex County, N.J." American Journal of Mental Deficiency, 1955, 60, 83-89. Quoted in M. Hutt and R.G. Gibby, op. cit.

a great deal from his parents, places demands on such a parent to give more than he is able to, and the dependency needs break through, often with catastrophic results.

(6) Reactions to Community. The parent reacts emotionally not only to the retardate, but also to the community's perception of and reaction to the problem of mental retardation. Society has many stereotyped attitudes and prejudices about mental retardation, and the parent cannot but be affected by them. Group pressures can force the family to become isolated, and the parent then tends to focus intently on every minute activity of his child. Weingold and Hormuth¹ point out that the final result is an increase in the parents' feelings of shame and guilt and the development of attitudes of rejection and overprotection toward the child.

(7) Guilt Feelings of Parents. The greater the existing guilt feelings of the parent, the more readily he tends to blame himself for the disabilities of his child. Theological conflicts often arise. Zuk² studied the relationship between religious factors and the role of guilt in the parental acceptance of

1. J.T. Weingold and R.P. Hormuth, "Group Guidance of Parents of Mentally Retarded Children." Journal of Clinical Psychology, 1953, 9, P.118-124. Quoted in M. Hutt and R.G. Gibby, op. cit.

2. G.H. Zuk, "The Religious Factor and the Role of Guilt in Parental Acceptance of the Retarded Child." American Journal of Mental Deficiency, 1959, 64, 139-147. Quoted in M. Hutt and R.G. Gibby, op. cit.

the child. He found significant differences between the degree to which Catholic and non-Catholic mothers accepted their retarded offspring, with the Catholic mothers being more accepting than the non-Catholic mothers. Zuk states that she accepts the fact that the child's condition was the result of a decision made by a high spiritual authority and that this enhances the possibility of the acceptance of the child.

Hutt and Gibby¹ conclude that if the religious background is such as to predispose the parent to a feeling of personal sin and guilt, without explicit absolution, then it is more likely that guilt related to the birth of the child will be experienced. The greater the guilt feelings, the greater the difficulties in accepting the child.

Development of Insight : "There appears to be a developmental process through which the parent usually passes before adequately recognizing and accepting the problems of his child"². Rosen³ points out a pattern of growing comprehension on the part

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1. M. Hutt and R.G. Gibby. I bid. P.316.
 2. M. Hutt and R.G. Gibby. loc.cit.
 3. L. Rosen, "Selected Aspects in the Development of the Mother's Understanding of her Mentally Retarded Child." American Journal of Mental Deficiency, 1955, 59, 522-528. Quoted in M. Hutt and R.G. Gibby. op. cit.

of the parent as he becomes aware of his child's problem. He postulates five levels in this process :

(1) awareness: when the parent perceives the child as being "different" from other children. The mean age of the child at the time of this perception is about two years and eight months.

(2) recognition: at about five years of age, that the child is retarded. The parent then seeks for:

(3) cause - of retardation. Next there is the phase of seeking for:

(4) solutions: the mother talks to all whom she perceives as possibly being of help to her. Finally,

(5) acceptance: when both the child and his problem are accepted by the parent.

This process of growth by the parent depends not only upon the basic emotional maturity of the parent himself, but also upon the guidance that he receives in coping with the problems involved.

Above are listed the more usual emotional reactions of the parent to the retarded child, but there are many other possible reactions that may occur. However, the point of primary importance: "The emotional reactions of the parent of the mentally retarded child are essentially a function of his own personality characteristics."¹

1. M. Hutt and R.G. Gibby: op. cit. P.317.

CHAPTER III

METHOD

The general area for our study - that of mental retardation - having been designated by the School of Social Work, we narrowed down our interest to the so-called "trainable" mental retardate, feeling that the variances in social functioning displayed by these people might prove a fruitful avenue of research. Through co-operation with the Association for Retarded Children in Greater Winnipeg, the decision was made to study children currently and previously enrolled in the Kinsmen School for Retarded Children.

This broad population was separated into three categories: six to twelve, thirteen to seventeen, eighteen and over. Each of the four groups of M.S.W. candidates involved in the project was assigned a particular category: one group dealt with those mental retardates eighteen and over, one group with those between thirteen and seventeen, and two groups with those from six to twelve. This particular study is concerned with the latter category, and the primary interest was the social adequacy of children in this group. Through discussion and reading our particular focus was ascertained: parental acceptance/rejection of the child, as it relates to his social functioning. This was further narrowed to the point where only the mother's acceptance of the child was involved, the rationale being that

the child's mother is the most influential figure in his life.

Some orientation was obtained through visits by two speakers: Dr. Glen Lowther, Medical Superintendent of the Manitoba School at Portage la Prairie, and Mr. A.H. Hoole, Executive Director of the Canadian Association for Retarded Children, Manitoba division; and by discussion with the staff of Kinsmen School. As well, a visit was paid to the School to observe the children in the classroom.

SAMPLE

With the permission of the Board of Directors of the Association for Retarded Children, the School of Social Work was provided with the roll of the children enrolled in the Kinsmen School with names and addresses of parents. The parents were advised by letter of the project, and they were asked to indicate if they did not wish to be included: the principle was one of opting-out, rather than opting-in. Out of this information we were able to identify our population in the age range six to twelve, and from this group were eliminated any who did not meet our criteria: of natural parentage and resident in greater Winnipeg; without serious psychical disabilities (e.g. cerebral palsy) and without retarded siblings.

In this way the actual population available was ascertained. Since two research groups were interested, two random samples were drawn. Ours consisted of fifty-six children;

a number deemed adequate for testing purposes. This group would be large enough to test our hypotheses and yet manageable enough to fit into the time available.

DATA:

The problem here was in trying to determine how to relate maternal rejection to the child's level of social functioning. Through our reading of the relevant literature we selected two instruments: the Bills - Vance - McLean Index of Adjustment and Values, as modified by Worchel and Worchel, and the Vineland Social Maturity Scale. The former was originally designed to measure the self-concept of the individual; the attitude the individual has toward himself; and what the individual considers his ideal self, or the values toward which he is striving. In Worchel and Worchel's revision, the Index was adapted to measure (a) the attitudes of parents toward mentally retarded children; (b) the concept of the ideal child held by parents; (c) the attitudes of parents toward most children. The discrepancy between parents' attitudes toward their own child and the parents' concept of the ideal child would yield an indirect measure of acceptance-rejection patterns. Forty traits were selected from Allport and Odbert (1936) and from the literature on mental retardation. In a spectrum ranging from "never" to "always", parents were asked to rate their own child, most children, and the ideal child, in terms of these traits.

The Index provided three indirect measures of parental acceptance of the child: ratings on the child himself; discrepancy between the ratings on own-child and ideal child; and between own-child and most children. It was assumed that the more negatively the parent rated his child, the greater the rejection. Also, the more the parent perceives his child as deviating from the "ideal" child and from other children, the less is his acceptance of this child.

The Vineland Social Maturity Scale was developed in 1935 by Dr. E.A. Doll, as a means of measuring the "adaptive behaviour"¹ of retardates.² Doll's purpose was to look at social adequacy in terms of social self-sufficiency, genetically expressed as progressive social maturation. The Scale consists of 117 items, each designed to represent some particular aspect of the retardate's ability to look after his own practical needs. The specific items aim to sample such aspects of social ability as self-sufficiency, occupational activities, communication, self-direction and social participation, and to reflect progressive freedom from need of assistance, direction, or supervision on the part of others. The items aim to avoid measuring intelligence, skill, achievement, personality, emotionality, and the specific results of

1. See Chapter II.

2. E.A. Doll, "A Genetic Scale of Social Maturity", American Journal of Orthopsychiatry, 1935, 5, 180-188.

environmental opportunity, training, incentive, habit, and so on, as such. The influence of such factors is expressed in terms of their composite capitalization for socially independent behaviour.

The examiner makes the scoring judgement after obtaining from the informant (in this case the mother) as much detail as practicable regarding the behaviouristic facts which reveal the manner and extent of the subject's actual performance on each item. Scores can then be converted to the equivalent social age values by means of a table.

Examples of the Bills - Vance - McLean Index and the Vineland Social Maturity Scale are attached, as appendices A and B. We were assisted in the use of the Vineland Social Maturity Scale by Miss L. Fry, psychologist with the Society for Crippled Children and Adults in Manitoba.

The original plan called for personal interviews with the mothers, for the purpose of administering the Vineland Scale. This was to be followed by the mothers meeting as a group in order that the rating scale be administered collectively. This was the procedure followed in the pre-test. A random sample of fourteen mothers was selected from the larger sample of fifty-six. Each of them was contacted directly by a student in order to set up an appropriate time for a home visit, and the Vineland Scale was administered on a one-to-one basis. The rating scale was then administered to the same

fourteen mothers on a group basis at the Kinsmen School on December 21, 1966.

Following our analysis of the pretest some modifications were decided upon. Difficulties had been encountered with differing interpretations of the traits on the rating scale and for this reason a list of definitions of the forty traits was drawn up. As well it was decided that the collective administration of the rating scale was unwise: the distractions inherent in a large group were thought to be inimical to thoughtful completion of the test, and the inconvenience of this also influenced our decision. A modification in the rating scale was effected: it was decided that the discrepancy between the first two columns was enough to determine the degree of acceptance/rejection. The contrast between the retarded child and the normal child was not deemed necessary for our purposes.

Following the pretest, each of the fourteen students in the group interviewed three mothers individually, administering the Vineland Scale first and then the rating scale.

ANALYSIS:

Scores were computed on both tests for each mother, and tabulated.

In order to determine the relationship between the mother's acceptance and the child's level of social maturity, as stated

in the first hypothesis, a correlative coefficient was taken between scores obtained on the instrument.

In order to determine the relationship between the variations in mother's acceptance and the difference in the sex of the child, the ranges between highest and lowest scores were determined and tabled for purposes of comparison. The means were determined and compared for both sexes. For further corroboration, medians were determined and compared for both sexes.

A further step was taken to relate sex and social maturity by finding the mean of the social maturity for both sexes: these were compared and tabled.

In order to determine the relationship between the variations in mother's acceptance and her level of academic education, a mean of the rating scale discrepancy score was determined for each grade level - from five or less, to twelve and over. These figures were tabled for purposes of comparison. A further step was taken to determine the relationship between mother's level of academic education and the child's social maturity. A mean of the Vineland Scale social quotients was determined for each grade level, and these figures were tabled for comparison. The above five steps were taken in order to confirm or dispute the second hypothesis, and sub-hypotheses one and two.

CHAPTER IV

ANALYSIS OF DATA

Out of the original population of 208, 38 mothers were eliminated for various reasons. From the remaining 170, 56 were chosen by random sample. Of these the pre-test took up 14, leaving a sample of 42, involving 23 boys and 19 girls. Scores were computed on both the Vineland Social Maturity Scale and the Rating Scale for each mother; tabulated; and a correlation coefficient between the two sets of scores was arrived at by applying the formula:

$$R = \frac{\sum xy - \frac{(\sum x)(\sum y)}{n}}{\sqrt{(\sum x^2 - \frac{(\sum x)^2}{n})(\sum y^2 - \frac{(\sum y)^2}{n})}}$$

where R stands for correlation coefficient, n for number of children, x for social quotient scores and y for rating scale scores. Thus:

$$R = \frac{165,963 - \frac{(2783)(2585)}{42}}{\sqrt{(203,114 - \frac{(2783)^2}{42})(183,217 - \frac{(2585)^2}{42})}}$$

The result was a correlation coefficient of $-.25$, a low negative correlation without real statistical significance, but indicative of some direct relationship between the two variables of social maturity and maternal acceptance.

The tabulations follow:

Table I : Distribution of social quotient scores for boys and girls.

Scores	n.	m.	f.
21-30	2	1	1
31-40	0	0	0
41-50	8	2	6
51-60	11	7	4
61-70	7	4	3
71-80	1	1	0
81-90	4	2	2
91-100	7	5	2
101-110	1	1	0
111-120	1	0	1

Table 2: Comparison of range, mean and median of social quotients for boys and girls.

	N	Range	Mean S.Q.	Median S.Q.
BOYS	23	27-101 Difference = 74	68	62
GIRLS	19	22-114 Difference = 92	64	59

In observing these two tables, it is noted that boys have higher social quotients than girls, and higher mean and median scores. However in table I there is a cluster of scores appearing in the 41-60 range with a proportionately higher number of girls (10 out of 19 girls, 9 out of 23 boys); in the middle range of 31-90 there are also proportionately more girls than boys (16 out of 23 boys, 15 out of 19 girls).

In the upper extreme, however, one finds 6 out of 23 boys and 3 out of 19 girls. It is this that explains the higher mean and median for the boys.

Table 3 : Distribution of Rating Scale Discrepancy scores for boys and girls.

Scores	n.	m.	f.
0-10	1	1	0
11-20	1	0	1
21-30	2	2	0
31-40	5	3	2
41-50	4	0	4
51-60	5	3	2
61-70	9	5	4
71-80	6	2	4
81-90	3	2	1
91-100	5	4	1
101-110	0	0	0
111-120	1	1	0
Total	42	23	19

Table 4: Comparison of range, mean and median for Rating Scale Discrepancy scores of boys and girls.

	N	Range	Mean S.Q.	Median S.Q.
BOYS	23	7-115 Difference = 108	64	69
GIRLS	19	18-95 Difference = 77	59	62
TOTAL	42			

In observing the clusters of scores in Table III, it will be noted that most fell into the 51-80 range, where there was an equal number of boys and girls. A greater proportion of boys than girls fell into the extreme ranges of 0-30 and 91-120, while in the range 31-90 one sees 15 boys and 17 girls.

This would indicate greater acceptance for girls, and the mean and median (lower for girls than for boys) tend to substantiate this.

Table 5: Distribution of mean discrepancy scores in relation to mothers' level of academic education.

Grade	n	mean discrepancy
5 or less	3	73
6	3	51
7	2	38
8	5	50
9	5	55
10	9	69
11	9	60
12	2	74
12+	4	75

It will be seen that the greatest number of mothers fall into the grade 10-11 category. At both extremes one notes higher mean discrepancy scores for the total sample.

In the middle range, between the two extremes, one notes lower mean discrepancy scores in the lower levels of academic education, with the scores at grade 7 being the lowest.

Table 6: Distribution of the mean social quotients in relation to mothers' level of academic education.

Grade	n	Mean S.Q.
5 or less	3	51
6	3	50
7	2	63
8	5	78
9	5	73
10	9	68
11	9	71
12	2	81
12 +	4	46

The highest educational levels showed the greatest variations in mean social quotients - from 81 to 46. The lowest educational levels - i.e. grades 5 and 6 - showed low mean social quotients - 51 and 50.

As a further step we compared tables V and VI, finding that the highest mean discrepancy scores correspond to the lowest mean social quotients, with one exception. In the grade 12 category the mean social quotient is high as well as the mean discrepancy scores. However, this involves only 2 people.

Implications of these data for our hypotheses will be examined in the next chapter.

CHAPTER V
CONCLUSIONS

Our purpose in this study was to investigate the relationship between the social maturity of the trainable mentally retarded child and the degree of acceptance/rejection on the part of the mother. We hypothesized, first, a direct relationship between the child's level of social maturity (measured by the Vineland Social Maturity Scale) and the mother's acceptance of the child in the family (measured by the Worchel and Worchel adaptation of the Bills, Vance and McLean rating scale). The variables bearing on the mother's degree of acceptance we took to be the sex of the child - on the assumption that cultural expectations for girls are lower -- and the mother's level of education - on the somewhat more questionable assumption that better educated people are apt to be more flexible.

With regard to hypothesis I, the correlation coefficient showed an inverse relationship between the child's social maturity and the mother's rejection. Our study thus indicates a somewhat tenuous correlation between maternal acceptance and the child's level of social maturity; insufficient for purposes of generalizing from the sample group to the larger population. The main hypothesis was borne out, then, but not in any significant sense.

Several possible reasons can be advanced for this low negative correlation. Other variables, perhaps directly relevant to the mother's acceptance of her retarded child, were not tested - e.g. the degree of marital friction in the home, attitude of the father and siblings, etc. The single interview with each mother might be seen as inimical to objectivity; however sensitive the interviewer and however objective the instruments, the mother's subjective feelings on that particular occasion might well have skewed the results on the Vineland Scale. The study drew no distinction between the two extremes of the age range studied, ignoring the very real differences in behaviour between a six year old and a twelve year old. Childish behaviour on the part of the younger retarded child might be accepted; childishness on the part of the twelve year old might not.

It should also be noted that in many cases questions were not answered, either because the mothers found them threatening or they were felt to be not applicable. As well, a somewhat superficial interpretation of the concept of "acceptance" for the purposes of this study might have had an adverse influence, although this is difficult to ascertain. However, the fact that the sample was too small to be of any statistical significance was very likely the most significant factor here.

The conclusions pertaining to our second main hypothesis (which postulated that variations in the level of the mother's acceptance of her child was related to her level of academic education, and to differences in the child's sex), can best be stated with reference to our two sub-hypotheses. The first assumes a higher degree of acceptance of girls than boys on the part of the mother, and our findings substantiated this, validating our assumption that maternal acceptance of her retarded child should reflect the fact that our society places higher expectations on boys than girls. However this should be seen in the light of the higher degree of social maturity for boys, noted in Table I. We concluded that the boys simply tried harder in order to meet the higher expectations of the mother in the area of social maturity. As well, the possibility that the Kinsmen School curriculum is more heavily weighted in areas where boys could reasonably be expected to do better than girls should not be overlooked, and this opens up a definite possibility for future research. The possible curtailing of opportunities for developing independence and maturity as a result of overprotection of the girls is another possibility. The lower level of social maturity and higher degree of acceptance for girls would indicate important factors which have

been overlooked.

The second sub-hypothesis postulated a direct relationship between the mother's level of academic education and her acceptance of her retarded child. This was not substantiated by our findings. Table V indicates high mean discrepancy scores at both extremes of the maternal educational range. In comparing tables V and VI it will be seen that the highest mean discrepancy scores correspond to the lowest mean social quotients, with one exception. In the light of all this, any relationship between the mother's level of academic education and the degree of acceptance of her child is not proven.

Notwithstanding the limitations noted above, our study has not been without its useful aspects. Although our findings are, in the main, inconclusive, they do point to areas where further research with more sophisticated instruments might be useful. In this connection it should be noted that the parent-child relationship deserves a rather more comprehensive and long-term approach than the somewhat over simplified one utilized in our study. As well, the question of a more scientific approach to acceptance and rejection - e.g. psychological testing - might repay our attention. Most important, in terms of the role of the social worker, is the need of the parents of these

unfortunate children for counselling, which emerged with great clarity during our study. If the study has done no more than point out pitfalls which future researchers should avoid, it will have justified the time and effort expended.

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APPENDIX A

- KEY (1) Never, (2) Seldom, (3) Occasionally,
 (4) About half of the time, (5) Frequently,
 (6) Very frequently, (7) Always

THE UNIVERSITY OF MANITOBA
SCHOOL OF SOCIAL WORK

THE RATING SCALE

Mother's Name.....
 Address.....
 Telephone.....
 Child's Name.....
 Age.....
 School he (she) attends.....

TRAITS	COLUMN I	COLUMN II
	My child is...	I wish my child were...
Agressive	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Alert	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Ambitious	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Annoying	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Anxious	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Busy	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Calm	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Competitive	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Confident	1 2 3 4 5 6 7	1 2 3 4 5 6 7

	My child is...	I wish my child were ...
Confused	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Considerate	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Cruel	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Defiant	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Demanding	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Dependable	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Destructive	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Docile	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Dominating	1 2,3 4 5 6 7	1 2 3 4 5 6 7
Fearful	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Friendly	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Hostile	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Inquisitive	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Jealous	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Meddlesome	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Merry	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Nagging	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Negative	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Nervous	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Patient	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Possessive	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Reckless	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Selfish	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Self-sufficient	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Sensitive	1 2 3 4 5 6 7	1 2 3 4 5 6 7

	My child is ...	I wish my child were
Spoiled	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Stable	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Timid	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Ungrateful	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Well-mannered	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Withdrawn	1 2 3 4 5 6 7	1 2 3 4 5 6 7

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APPENDIX B

*Vineland Social
 Maturity Scale*

E Last First Sex Grade Date Year Month Day

nee School Born Year Month Day

I.Q. Test Used When Age Years Months Days

tion Class Years Exp. Schooling

s Occupation Class Years Exp. Schooling

's Occupation Class Years Exp. Schooling

nt Relationship Recorder

ant's est. Basal Score*

aps. Additional pts.

ARKS: Total score

Age equivalent

Social quotient

Age Periods

O - I

Score*	Items	LA Mean
	1. "Crows"; laughs	.25
	2. Balances head	.25
	3. Grasps objects within reach	.30
	4. Reaches for familiar persons	.30
	5. Rolls over	.30
	6. Reaches for nearby objects	.35
	7. Occupies self unattended	.43
	8. Sits unsupported	.45
	9. Pulls self upright	.55
	10. "Talks"; imitates sounds	.55
	11. Drinks from cup or glass assisted	.55
	12. Moves about on floor	.63
	13. Grasps with thumb and finger	.65
	14. Demands personal attention	.70
	15. Stands alone	.85
	16. Does not drool	.90
	17. Follows simple instructions	.93

to categorical arrangement of items:

- Self-help general C -- Communication I -- Locomotion
- Self-help dressing SD -- Self-direction O -- Occupation
- Self-help eating S -- Socialization

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18. Walks about room unattended	1.03
19. Marks with pencil or crayon	1.10
20. Masticates food	1.10
21. Pulls off socks	1.13
22. Transfers objects	1.20
23. Overcomes simple obstacles	1.30
24. Fetches or carries familiar objects	1.38
25. Drinks from cup or glass unassisted	1.40
26. Gives up baby carriage	1.43
27. Plays with other children	1.50
28. Eats with spoon	1.53
29. Goes about house or yard	1.63
30. Discriminates edible substances	1.65
31. Uses names of familiar objects	1.70
32. Walks upstairs unassisted	1.75
33. Unwraps candy	1.85
34. Talks in short sentences	1.95

II - III

35. Asks to go to toilet	1.98
36. Initiates own play activities	2.03
37. Removes coat or dress	2.05
38. Eats with fork	2.35
39. Gets drink unassisted	2.43
40. Dries own hands	2.60
41. Avoids simple hazards	2.85
42. Puts on coat or dress unassisted	2.85
43. Cuts with scissors	2.88
44. Relates experiences	3.15

III - IV

45. Walks downstairs one step per tread	3.23
46. Plays cooperatively at kindergarten level	3.28
47. Buttons coat or dress	3.35
48. Helps at little household tasks	3.55
49. "Performs" for others	3.75
50. Washes hands unaided	3.83

IV - V

51. Cares for self at toilet	3.83
52. Washes face unassisted	4.65
53. Goes about neighborhood unattended	4.70
54. Dresses self except tying	4.80
55. Uses pencil or crayon for drawing	5.13
56. Plays competitive exercise games	5.13

O	57. Uses skates, sled, wagon	5.13
C	58. Prints simple words	5.23
S	59. Plays simple table games	5.63
O	60. Is trusted with money	5.83
L	61. Goes to school unattended	5.83

VI - VII

F	62. Uses table knife for spreading	6.03
C	63. Uses pencil for writing	6.15
D	64. Bathes self assisted	6.23
D	65. Goes to bed unassisted	6.75

VII - VIII

G	66. Tells time to quarter hour	7.28
F	67. Uses table knife for cutting	8.05
S	68. Disavows literal Santa Claus	8.28
S	69. Participates in pre-adolescent play	8.28
D	70. Combs or brushes hair	8.45

VIII - IX

O	71. Uses tools or utensils	8.50
O	72. Does routine household tasks	8.53
C	73. Reads on own initiative	8.55
D	74. Bathes self unaided	8.85

IX - X

IE	75. Cares for self at table	9.03
ID	76. Makes minor purchases	9.38
L	77. Goes about home town freely	9.43

X - XI

C	78. Writes occasional short letters	9.63
C	79. Makes telephone calls	10.30
O	80. Does small remunerative work	10.90
C	81. Answers ads; purchases by mail	11.20

XI - XII

O	82. Does simple creative work	11.25
SD	83. Is left to care for self or others	11.45
C	84. Enjoys books, newspapers, magazines	11.58

XII - XV

S	85. Plays difficult games	12.30
ID	86. Exercises complete care of dress	12.38
SD	87. Buys own clothing accessories	13.00
S	88. Engages in adolescent group activities	14.10
O	89. Performs responsible routine chores	14.65

XV - XVIII

90. Communicates by letter	14.95
91. Follows current events	15.35
92. Goes out unsupervised alone	15.55
93. Goes out unsupervised daytime	16.13
94. Has own spending money	16.53
95. Buys all own clothing	17.37

XVIII - XX

96. Goes to distant points alone	18.05
97. Looks after own health	18.48
98. Has a job or continues schooling	18.53
99. Goes out nights unrestricted	18.70
100. Controls own major expenditures	19.68
101. Assumes personal responsibility	20.53

XX - XXV

102. Uses money providently	21.5 +
103. Assumes responsibility beyond own needs	21.5 +
104. Contributes to social welfare	25 +
105. Provides for future	25 +

XXV+

106. Performs skilled work	25 +
107. Engages in beneficial recreation	25 +
108. Systematizes own work	25 +
109. Inspires confidence	25 +
110. Promotes civic progress	25 +
111. Supervises occupational pursuits	25 +
112. Purchases for others	25 +
113. Directs or manages affairs of others	25 +
114. Performs expert or professional work	25 +
115. Shares community responsibility	25 +
116. Creates own opportunities	25 +
117. Advances general welfare	25 +

hed by

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APPENDIX C

DEFINITION OF WORDS USED IN THE RATING SCALE

- aggressive - unpeaceful, belligerent, shows fight.
- alert - watchful, attentive, takes notice.
- ambitious - purposeful, pursues something, bent upon doing certain things.
- annoying - vexing, bothersome, source of irritation.
- anxious - uneasy, unsatisfied, concerned, on pins and needles.
- busy - active, animated, lively, eager, on the go.
- calm - tranquil, mild, peaceful, gentle as a lamb.
- competitive - contrary, ready to pitch into things.
- confident - firm trust in oneself or ones chances, feeling or showing assurance.
- confused - thrown into disorder, mixed up, failure to know which is which.
- considerate - thoughtful for others, careful not to hurt feelings or give inconvenience.
- cruel - delighting in or callous to other's pain, or act so as to illustrate these feelings.
- defiant - express disbelief in power of (person) to do, refuse obedience to or set at naught authority.
- demanding - constantly making requests.
- dependable - reliable.
- destructive - destroy, make away with, reduce to nothing or to uselessness.
- docile - gentle, tractable, teachable, submissive, easily managed or handled, readily trained or taught.
- dominating - ruling over, governing, controlling, overshadowing.

DEFINITION OF WORDS USED IN THE RATING SCALE - cont'd

fearful	- afraid, frightened, timid, nervous, apprehensive, restless, fidgety, anxiety, dismayed.
friendly	- familiar, cordial, hospitable, neighbourly, on good terms, amiable, genial, kindly, inclined to approve, help or support.
hostile	- antagonistic, opposed, unfriendly, belligerent, adverse.
inquisitive	- desirous of or eager for knowledge, curious, prying, questioning, meddlesome.
jealous	- covetous, envious, suspicious, resentment of a successful rival, suspicious fears.
meddlesome	- interfering, concerned with or in something without warrant or necessity.
merry	- cheerful.
nagging	- disagreeing, disputing.
negative	- contrary, opposite.
nervous	- restless.
patient	- persistent, constant, steady.
possessive	- holding, keeping, not wanting to give up.
reckless	- impulsive, rash, acting without thinking.
selfish	- concerned with one's own interest, not sharing freely.
self-sufficient	- independent, able to look after oneself.
sensitive	- impressionable, easily moved.
spoiled	- gets own way.
stable	- secure, level-headed, firm. Being able to take daily ups and downs.
timid	- fearful, cowardly, shy.
ungrateful	- thankless.
withdrawn	- shrinking away.

APPENDIX D

Table showing social quotient scores, rating scale discrepancy scores and the mothers' level of academic education, of the forty-two children involved in the sample.

Case No.	Child's Age.	Sex of Child	S. Q.	Disc. Score.	Mother's level of Academic Education.
1	8	M	51	59	Grade 11
2	6	M	56	39	Grade 10
3	10	F	85	44	Grade 11
4	9	F	50	53	Grade 9
5	11	M	53	54	B.Sc.
6	7	F	67	50	Grade 9
7	6	F	42	43	Grade 10
8	12	M	83	31	Grade 11
9	9	F	60	41	Grade 10
10	11	F	50	65	B.I.D.
11	9	M	92	69	Grade 12
12	9	F	114	85	Grade 10
13	11	F	84	37	Grade 7
14	12	M	57	74	Grade 5
15	10	F	54	62	Grade 11
16	12	F	49	72	Grade 5
17	6	F	96	80	Grade 11
18	9	M	97	7	Grade 8

19	11	F	70	18	Grade 6
20	7	F	47	75	Grade 5
21	12	M	62	84	Grade 9
22	11	F	70	78	Grade 12
23	11	M	27	115	Grade 12†
24	12	F	56	62	Grade 10
25	10	F	59	95	Grade 6
26	10	M	60	91	Grade 11
27	7	M	87	65	Grade 9
28	8	M	65	83	Grade 8
29	7	F	49	53	Grade 11
30	12	F	22	39	Grade 6
31	9	M	41	78	Grade 8
32	8	M	101	21	Grade 9
33	8	M	63	62	Grade 10
34	8	M	55	66	B.A.
35	7	M	96	92	Grade 10
36	7	M	93	55	Grade 11
37	12	M	53	100	Grade 10
38	11	M	71	96	Grade 10
39	8	M	93	21	Grade 8
40	13	M	42	39	Grade 7
41	10	F	93	63	Grade 8
42	9	M	68	69	Grade 11

Total - 42

Total	Total
2783	2585