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GRADUATE COLLEGE

AN EXPERIMENTAL INVESTIGATION OF FAMILY RELATIONSHIPS AMONG MENTAL RETARDATES

A DISSERTATION

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AN EXPERIMENTAL INVESTIGATION OF FAMILY RELATIONSHIPS

AMONG MENTAL RETARDATES

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AN EXPERIMENTAL INVESTIGATION OF FAMILY RELATIONSHIPS AMONG MENTAL RETARDATES

CHAPTER I

INTRODUCTION

The Development of the Intellect

Alfred Binet, a Frenchman (1857-1911), is called the father of intelligence testing because he devised the first intelligence test of any promise.

> We may not know what "intelligence" is, but we know that the word stands for something that is of inestimable value in a competitive world--and we are not offered the choice of living in any other. This competitive world of ours forces us to value "intelligence" whatever it may be (Hardin, 1962, p. 15).

In terms of a quality or condition of individual difference, intelligence has been a construct devised to explain the potentialities of the human being for learning, for producing, and for adjusting to the environment. Historically, the differences noted have been speed, accuracy in solving a problem, assembling a device, or devising a plan of action. The modern emphasis is on process rather than potential, with a recognition that multiple factors may facilitate or retard the development of the intellect. The intellects of children develop only by what their eyes see, ears hear, noses smell, hands touch, and tongue tastes. The availability and nature of

materials and equipment, the access to other children, the degree of health of the senses, all contribute to mental development.

The factors effecting the development of the intellect can be considered under the two categories of heredity and environment. The two are inextricably intertwined with heredity setting the limit within which the organism may develop.

> In the case of psychological traits, these limitations for most persons may be so wide as to allow almost unlimited variation. At the same time there seems to be little evidence that a given intellectual trait can be directly dependent upon heredity. The variation in the extent of development of the inherited potentials are a reflection of the stimulation of the environment conditions (Harsh, 1961, p. 23).

Hereditary factors include family resemblance, similarities of the biological organism, organic conditions limiting human development, physical deficiencies, and selective breeding.

Measured intelligence is probably a function of the child's culture. In addition to values and personality traits, each cultural group tends to foster the development of aptitudes. It is quite possible that some intelligence tests are suitable for one culture, but not another.

Evidence from studies of mental maturity indicates that development is continuous from infancy to adulthood unless brain cells are destroyed by disease or injury.

Rather than intelligence it is more appropriate to speak of intelligences of mental abilities. Each person represents a profile of abilities reflecting the stimulation and opportunity provided by the heredity, culture, education, family, and others. Examples of these abilities are mechanical, social, verbal, abstract, and

spatial-perceptual. The thing measured by intelligence tests is probably scholastic aptitude: certainly they do not give a comprehensive picture of the intelligence of man. There are also measurements of spatial, mechanical, and social abilities which are quite separate from academic abilities. One should, therefore, be as interested in intraindividual differences (trait variability) within an individual as much as difference among individuals.

Many terms are in popular use to denote mental retardation. In this study "mental retardation," "mental deficiency," "mental subnormality," "mental handicap," and "feeble-mindedness" are used synonymously.

The Term "Mental Retardation"

Many attempts have been made to define precisely what is meant by the concept of "mental retardation," not only in terms of the intelligence quotient (I.Q.), but more adequately in consideration of many additional factors, such as the nature of the intellectual development of the child, and the manifold conditions that affect the rate of his development, as well as the specific manifestations at any given period. The broadest definition of mentally retarded children is: those human beings who, because of limited mental capacities, are without special assistance, incapable of adapting to their environment. These include children for whom special efforts must be made to enable them to live a reasonably normal, self-sufficient, productive life in our society. They may not always be able to respond to these special

efforts and may even, despite such training, require lifelong care and supervision.

Among the many definitions of mental retardation is that of Doll who describes this condition as:

> . . . one of special incompetence due to subnormal intellectual powers which have been arrested in development (1941, p. 161.)

and in a more explicit statement, develops his definition further:

> . . . six criteria by statement or implication have been generally considered essential to an adequate definition and concept. These are: (1) social incompetence; (2) due to mental subnormality; (3) which has been developmentally arrested; (4) which obtains at maturity; (5) is of constitutional origin, and (6) is essentially incurable (1941, p. 163).

Doll's (1941, p. 163) definition of social incompetence "which obtains at maturity" implies a permanent kind of inferiority or handicap which is of constitutional origin and cannot be cured. This may be a result of heredity or to damage from disease, deprivation or trauma. Maturity is taken to mean that age, somewhere between fifteen and twenty-one, at which physical and intellectual development have peaked biologically, physically and intellectually. Beyond this point, any growth that occurs, takes place in the realm of wisdom, mechanical skills and social awareness.

It should be noted that the ultimate criteria stressed are those of competence and the ability to adapt and adjust to the demands of society. In these respects the behavioral reaction of the mentally retarded child is the product of many interesting forces. The home environment, the attitude of the child's parents and siblings toward him, the child's attitudes toward the parents, his acceptance by

neighbors, and friends, his classmates, as well as his lowered intellectual potential--all influence the child's reaction. In coping with these behavioral reactions, it is essential to understand primarily the underlying reasons; that is, to adopt a dynamic approach to these problems.

Tredgold defines mental retardation as:

> 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 independent of supervision, control or external support (1937, p. 210).

Perry describes the dynamic approach as follows:

> . . . It requires a complete reassessment of the nature of mental deficiency. . . . Each mentally defective person must be considered, not as belonging to a homogeneous category called deficiency, but as an individual; his sub-normal intellectual functioning must be considered, not as constitutionally or organically determined, but as an interdependent complex of constitutional or physiological processes, interpersonal processes, and sociocultural processes; and from a research standpoint the mentally defective must be approached, not with an assumption of irreversibility and permanence, but with the assumption that benevolent intervention may lead to a reversibility of improvement of the conditions (1954, p. 46).

The modern approach to the problem is to view the intelligence test score as one phase of appraisal, an integral part of the child's total personality and ability to function, but to give equal importance to many other factors that compose the total personality picture.

Jordan states:

> Mental retardation is the condition which accounts for the lower end of the curve of intellectual abilities, and the study of mental retardation illustrates the extent to which one human being can differ in intellectual characteristics from his fellows (1961, p. 1).

Dybwad says:

> Mental retardation is a condition which originates during the development period and is characterized by markedly sub-average intellectual functioning, resulting to some degree in social inadequacy (1961, p. 5).

Heber relates:

> Mental retardation refers to sub-average general intellectual functioning which originates during the development period and is associated with impairment in one or more of the following: (1) maturation; (2) learning; (3) social adjustment (1961, p. 9).

Sub-average refers to performance which is greater than one standard deviation below the population mean of the age group involved on measures of general intellectual functioning.

This level of general intellectual functioning may be assessed by performance on one or more of the various objective tests which have been developed for that purpose. Though the upper age limit of the developmental period cannot be precisely specified, it may be regarded, for practical purposes, as being at approximately sixteen years. This criterion is in accord with the traditional concept of mental retardation with respect to age and serves to distinguish mental retardation from other disorders of human behavior.

Heber's definition specifies that the sub-average intellectual functioning must be reflected by impairment in one or more of the following aspects of adaptive behavior: (1) maturation; (2) learning; (3) social adjustment. These three aspects of adaption assume different importance as qualifying conditions of mental retardation for different age groups.

Rate of maturation refers to the rate of sequential development of self-help skills of infancy and early childhood such as sitting,

crawling, standing, walking, talking, habit training, and interaction with age peers. In the first few years of life adaptive behavior is assessed almost completely in terms of these and other manifestations of sensory-motor development. Consequently, delay in acquisition of early developmental skills is of prime importance as criterion of mental retardation during the preschool years.

Learning ability refers to the facility with which knowledge is acquired as a function of experience. Learning difficulties are usually manifest in the academic situation and if mild in degree, may not even become apparent until the child enters school. Impaired learning ability is, therefore, particularly important as a qualifying condition of mental retardation during the school years.

Social adjustment is particularly important as a qualifying condition of mental retardation at the adult level where it is assessed in terms of the degree to which the individual is able to maintain himself independently in the community, and in gainful employment as well as by his ability to meet and conform to other personal and social responsibilities and standards set by the community. During the preschool and school age years, social adjustment is reflected, in large measure, in the level and manner in which the child relates to parents, other adults and his age peers.

It is this accompanying deficiency in one or more of these three aspects of adaptation which determines the need of the individual for professional services and for legal action as a mentally retarded person.

Sarason approaches mental retardation from a psychosocial viewpoint:

> Mental retardation refers to the individuals who, for temporary or long-standing reasons, function intellectually below the average of their peer groups but whose social adequacy is not in question or, if it is in question, there is the likelihood that the individual can learn to function independently and adequately in the community (1955, p. 44).

Jervis takes a medical viewpoint:

> . . . mental deficiency may be defined, from a medical point of view, as a condition of arrested or incomplete mental development induced by disease or injury before adolescence or arising from genetic causes (1952, p. 175).

Ingraham views retardation in educational terms:

> The term "slow-learning" is used by many as a designation for any child who cannot meet average grade academic standards year by year. This group comprises approximately 18 to 20 per cent of the school population. Those who measure approximately 50 to 89 IQ on individual standardized intelligence scales. Within this classification the terms "borderline" or "dull normal" are generally applied by the psychologist to those who measure approximately 75 to 89 IQ. This is the larger group, comprising 16 to 18 per cent of the school population. The terms "mentally retarded" or "mentally handicapped" are applied to those who measure approximately 50 to 75 IQ, the lowest 2 per cent of the school population in learning ability (1953, p. 4).

Porteus and Corbett take a legal view of retardation:

> Feeble-minded persons are those who by reason of permanently retarded or arrested mental development existing from an early age are incapable of independent self-management and self-support (1953, p. 103).

Benoit takes a neuropsychological viewpoint:

> Mental retardation may be viewed as a deficit of intellectual function resulting from varied intrapersonal and/or extra-personal determinants, but having as a common proximate cause a diminished efficiency of the nervous system, thus entailing a lessened general capacity for growth in perceptual and conceptual integration and consequently in environment adjustment (1959, p. 56).

Johnson says:

> The mentally handicapped are defined as those children who are so intellectually retarded that it is impossible for them to be adequately educated in the regular classroom. They are, however, educable in the sense that they can acquire sufficient knowledge and ability in the academic areas that the skills can and will become useful and useable tools. Further, they have a prognosis of social adequacy and occupational or economic self-sufficiency as adults. They will be able to apply the skills learned during the years of their formal education, toward maintaining an independent, social and economic existence as adults (1958, p. 190).

Dolch contends that we must distinguish between the mentally retarded and the mentally deficient. He states:

> Teachers usually define mentally deficient as the children who cannot learn. The assumption is that they cannot, because they do not have the "brains" with which to learn. It would be more correct to say that these children do not learn. Men who have worked with this type of child tell us that some of these children who do not learn are not hindered by lack of "brains" but by other things. If the result is actually mentally deficient, there is nothing we can do to remedy the deficiency. But if he has been retarded instead, we can overcome the retardation to some extent at least. So it is wisest, in the case of any particular child, to ask ourselves whether his apparent mental deficiency may not be instead a case of mental retardation (1948, p. 221).

Efforts to define mental retardation have been made by hundreds of people. A descriptive definition proposed by one may not be better than those which have been proposed by others. It is doubtful that the lack of one single definition at this time should retard our efforts in applying current knowledge toward an investigative effort.

While the lack of agreement on terminology continues to plague researchers and reviewers, educators and psychologists appear to be moving toward agreement that mental retardation should be used as a broad generic term including a wide range of psychological and

physical syndromes which have one common base--subnormal intellectual development.

Degrees of Retardation

The degrees of mental retardation have traditionally been determined by tests from which an intelligence quotient (IQ) can be calculated. It has never been proved or disproved that human abilities tend to be distributed in a normal curve, i.e., with a large number clustering around the center with fewer at either extreme. If the tabulations of scores do not reflect a normal distribution, the cause may usually be traced to sampling irregularities, special environmental conditions, or characteristics of the measuring instrument. The intelligence quotient is merely a numerical representation of how well a given child performs on a particular series of test items in relation to the performance of other children of similar age. Quantitatively, the test scores can be interpreted only in terms of a norm. The norm must be derived from scores of children who are considered representative of the pupils for whom the test is contended. Norms do not signify what might have been found under other circumstances with different methods, different school and home environment, and educational objectives. The significance of an IQ depends upon its position in a distribution of IQ's.

Historically, the IQ has been used in terms of prediction of academic success. This, essentially, is a deterministic approach with an assumption that the nature of an individual's past will continue into the future. The assumption is hazardous, however, because of the

large number of biological, social, cultural and psychological factors that may affect human beings. Changes in medical treatment and state of health, school environment and method, attitude and training of parents and teachers, and geographical location make prediction based on the IQ inadequate.

How then can the IQ be used as an instrument to identify the mentally retarded child? The IQ can be determined by scores made in reaction to verbal and non-verbal material. It should be noted that all tests have only one thing in common; i.e., the comparison of the child's performance with others of his same age. None of these tests nor any other measure of mental ability suggest an IQ to characterize the abilities of a child. Each of the testspresents different content and situations which will cause variations in IQ. Inasmuch as they probably measure different abilities, then the variable performance may point up a profile of abilities. Certainly, identification and prediction based upon various kinds of intellect is apt to be much more accurate than when based upon one test.

Classification of Mental Retardation

There is no universal agreement as to the classification of children who are mentally retarded. A precise scientific approach has not been yet developed, and in some respects, classification is an arbitrary matter. Many of the systems in use currently are based on different sets of criteria, including the presumed etiology, the behavioral characteristics of the children, or upon intelligence test performance.

Benda (1952, p. 312) has evolved a classification of these children regarded as "intellectually inadequate" (with an intelligence quotient range from 50 to 70) which lists five major categories:

1. Emotionally Disturbed Normal Children: These score low on intelligence tests because of factors which exist outside of the intellectual field. Because of their low scores they are thought to be mentally retarded. However, in this category, it has been pointed out by Clarke and Clarke (1955) that: an early adverse environment may have a crippling effect on mental development. Removal or correction of such environmental factors will improve the apparent intellectual retardation, and result in a higher intelligence score.

This lack of clarity in regard to the relationships between intelligence test scores and behavioral manifestations of intelligence has established the concept of pseudo-feeblemindedness. The change in a child's performance may occur spontaneously, but more often it is the result of active intervention upon the part of the teacher or examiner. This intervention might be the removal of the child to a more positive environment, the use of psychotherapy or the correction of a sensory defect.

2. Mentally Ill Children with Low Intelligence: These children are unable to cope with the test situation in a successful manner and score low in spite of their adequate intellectual potentials. This is due to a serious emotional disorder, such as childhood schizophrenia, or infantile dementia. The most prevalent picture of a mentally retarded child with severe personality involvement appears to be one in which there are severe withdrawal symptoms and unnatural mannerisms. A serious handicap in treating children in this group is the great difficulty encountered in gaining any access to their thought processes.

3. Biologically Normal Children with Low Intelligence: These children have no demonstrable biological involvements, but exhibit a low degree of intelligence. They constitute a "normal" part of our population. The subcultural level is composed of this group, to a large extent.

4. Oligoencephaly: These children are considered as being pathological in terms of their overall constitutional inadequacy.

5. Brain-injured Children: These children are considered to be more or less "accidental" cases. The injury may result from such causes as birth trauma, infectious diseases, or metabolic disorders. Although psychological test performance is used in this classification, it nevertheless includes many additional factors in the final diagnosis.

The American Psychiatric Association (1952, p. 201) has postulated a classification consisting of three categories as follows:

1. Mild Deficiency: Children at this level can profit from a simplified school curriculum and make an adequate, though modest, social adjustment. They have a range in intelligence from 66 to 80 and learn to adjust well to varying social situations. With adequate attention and guidance they may even acquire a "social veneer" and can mingle in social groups with some degree of success. The kind of achievement they attain, however, is directly dependent upon the treatment and guidance offered them.

2. Moderate Deficiency: These children need special academic and vocational training and guidance, but do not require institutional care. They range in intelligence from 50 to 65, more or less, but it should be stressed that the intelligence test score in itself does not entirely determine the particular level of deficiency. Here again, also, it should be stressed for both of the foregoing groups, that each child is an individual, and differs from other children in many respects, though each of the groups has some characteristics in common.

3. Severe Deficiency: These children relate to other persons only at the most elementary level. They tend to be totally lost in any but the most elementary social situation, and may require some type of custodial supervision.

Strauss' (1947) classification is based upon etiological or causative factors and consists of two major divisions:

1. Exogenous conditions, which are composed essentially of brain injured children, the damage having occurred before, during or following the birth of the child. However, Strauss excludes from this

grouping children who show signs of gross neurological involvement, and limits their classification to those with no motor disabilities, but whose test performances are indicative of some brain damage.

2. Endogenous conditions, which encompass children with no brain damage, but who are, nevertheless, mentally retarded.

Lewis (1933) has a classification divided into two categories, consisting of the pathological group, or children whose intellectual deficiencies are traced to some organic birth damage, and the sub-cultural group, or children with no demonstrable brain damage of other physical pathology.

Mental defects determined by multiple genes are classified as "undifferentiated" because they carry no specific physical distinction and are "aclinical" in that they show no clinical manifestation other than intellectual impairment. This group has also been classified by other terms: "Residual" because it is composed of persons who are left after a classification of specific terms; "Subcultural environments"; "Familial" because of the high frequency of the condition in the subject's families. These cases can be diagnosed only by psychological and social adjustment criteria, differentiation between high-grade morons and dull-normal individuals may be difficult. Sometimes antisocial behavior and psychopathic traits occur in this group but they are far from universal. It has been estimated that undifferentiated mental defects account for three to seventy-five per cent of all the mentally retarded.

Summary

The public's view of the mentally retarded child has begun to change. There is a tendency to drift away from the precise clinical diagnosis toward a more general appraisal of the child as a person and with more evaluation of his total individual aptitudes.

Doubtless, hundreds of definitions have been proposed to describe mental retardation. No one single definition describes all the mental deficiencies and several will be needed for the different entities. However, this should not retard our efforts in applying current knowledge toward research. Educators and psychologists appear to be reaching agreement that mental retardation should be used as a broad generic term including a wide range of psychological and physical syndromes which have one common base-subnormal intellectual development. There is no universal agreement as to the classification of children who are mentally retarded. Classification, in most respects, seems to be an arbitrary matter.

Parent-Child Relationships

One of the basic tenets of developmental psychology is the thesis that the early familial environment of the child, especially the prevading parental attitude or emotional tone of the parent-child relationships is a fundamental factor influencing the development of personality. Clinical data offer strong support to the theory of a correlation between parent-child relationships and the nature of children's personality or relative adjustment (Jackson, Klatskin, and Wilkin, 1952; Martin, 1942; Newell, 1934; Symonds, 1938). Much

research has been effected for the purpose of isolating the particular attitudes which affect the child (Brown, 1942,; Chwast, 1956; Hattwick, 1936; Zucker, 1943) and the qualities of personality that are the results of the specific attitudes determined. Often, this research has been inadequate or contradictory, leaving a confused picture of the relationships involved.

A review of the research offers a few explanations for the meagerness of results of this problem: Ausubel's (1954) study suggests that the essential relation is that which exists between the child's perception of his familial environment and his adjustment and not, as has been thought between expressed parental attitudes and childhood adjustment. Based on evidence in Swanson's (1950) study of delinquents Serot and Teevan (1961) thought that, rather than use attitudes as good indicators of the nature of the parent-child relationship, it might be more useful to measure the proximity of a given child's relationship to the theoretical ideal relationships. These two possibilities suggested a third: if it is the child's perception of the parent-child relationship which affects his adjustment, then parental perception of the parent-child relationship may well disagree with the child's perception of the same, and if so, the former is unlikely to be related to the child's adjustment. They found that a child's adjustment is related to his perception of his relationship with his parent's perception of the same; and the parents' perception of the relationship is unrelated to his offspring's adjustment.

Maternal Rejection

Psychoanalysts say that all love relationships have an ambivalent quality, that is, the attitude of every mother toward her child is influenced by the fact that there are some disadvantages associated with every birth.

Causative Factors: No attempt will be made to review the literature except to cite two or three types of explanations for a mother's hostility toward her child. Jones, in discussing the transference, in the parent's mind, from the grandparent to the child of the corresponding sex says:

> I have studied several instances in which a person who from childhood had developed a hostile attitude toward one or the other parent then took up the same attitude toward his or her own child; a woman who hated her mother and then hated her daughter, or a man who hated his father and then hated his son (1923, p. 82).

Zilboorg (1929) discussed a group of women who developed schizophrenic reactions in pregnancy or following child birth. He found the prominent features in those cases to be the Oedipus complex modified by penis envy of the revengeful type, along with strong homosexual trends, identifying with the father in wanting to assume the masculine role. The early part of the pregnancy is not stormy as the foetus represents the possession of a penis. However, child birth represents castration and gives rise to hostility directed against the child. In another article Zilboorg says:

> In the unconscious of the woman the child plays many roles, among others it is an expression of the husband's (father's) virility, and as a matter of fact, patients frequently equate child with penis in their dreams. Hence the woman who harbors

> strong castrative wishes naturally hurls her castrative hostility onto the child, particularly when it happens to be a boy (1931, p. 951).

In still another article in which he discusses parent-child antagonism, Zilboorg (1932, p. 736) says: "Powerful, hostile impulses underlie quite frequently the benevolence of the parent." Again he says, "The traditional view that parental love is an immutable instinct thus seems to need substantial qualification, for this instinct not infrequently presents but a very small proportion of the sum total of a parent's feeling for his or her offspring.

Horney, in discussing a mother's attitude toward her son, says:

> Not only the incestuous sexual elements are transferred from the infantile relation to the father, but also the hostile elements which necessarily were once connected with them. A certain residue of hostile feelings is unavoidable, as a result of equally unavoidable affects caused by jealousy, frustration and guilt feelings (1933, p. 460).

It is interesting to note that on the basis of the mechanism described by Jones (1923) one might assume a mother's hostility would be directed more frequently toward her daughters than toward her sons. On the other hand one might assume from Zilboorg's (1932) and Horney's (1933) statements that it would be directed more frequently toward the son.

Indirect Causative Factors: Data points to the conclusion that the most important single cause for a mother's rejection of her child is her own unhappy adjustment to her marriage. This picture of marital maladjustment is corroborated by Figge (1932) who studied thirty-five rejected children and contrasted them with thirty-five non-rejected

children. Eighty per cent of the rejected children saw their parents as socially incompatible as compared with thirty-seven per cent of the non-rejected children. Gleason's (1931) study of maternal rejection also shows similar findings. Aichorn (1925), in describing a group of delinquents who were brought up by too much sternness, gives the same general picture of marital discord.

To adequately interpret the causes of these failures to adjust to marriage, it would be necessary to follow many specific cases through in detail. Here we can only summarize by saying that the chief cause seems to be the emotional instability of the parents.

It is interesting to note the backgrounds of these unstable individuals, for in many instances their present home conditions seem to repeat those found in their childhood homes. Figge (1932) obtained similar findings in the study referred to above. Foley (1923) studied 100 clinic children selected as to wealth of detailed information. She found that 41 per cent of the mothers showed some form of over-protection. Nineteen per cent displayed overt rejection, while 40 per cent of the mothers did not fall in either group. In studying the early childhood of these mothers she found that the majority of the over-protective mothers had been deprived of affection and were made to assume a great deal of responsibility. The non-rejecting mothers, on the other hand, tended to be brought up in an environment with sufficient affection and where little responsibility was required of them.

How Children Are Handled: In studying the methods parents use in handling their children it seems they group themselves rather naturally into three types. In the first place the parents show their

rejection in pure or undisguised form (overt rejection). They may, on the other hand, have a sense of guilt for having rejected their child and over-protect the child as a reaction (over-protection). Finally, their methods of handling may show a mixture of the above types (mixed).

There are various methods of handling the child included in the category of overt rejection. Horney describes how jealousy may make a mother tend to belittle her daughter. She says:

> Such rivalry may show in a general intimidation of the child, efforts to ridicule and belittle her, prevent her from looking attractive or meeting boys, and so on, always with the secret aim of thwarting the daughter in her female development (1933, p. 459).

Over-protective methods are presumed to be reactions to feelings of guilt. Horney, in describing this type of behavior in mothers, says:

> The one form in which the conflict between love and hate may consciously come out is an oversolicitous attitude. These mothers see their children constantly beset by dangers. They have an exaggerated fear that the little ones may contact illnesses or infections, or meet with accidents. They are fanatical about their care (1933, p. 459).

Zilboorg, describing the same type of reaction, says:

> This hostility is to a great extent unconscious, but it breaks through into consciousness quite invariably in the form of fear lest something happen to the child, that the child might die, that it is dangerously neglected, or that it is not normal (1931, p. 927).

Zilboorg, in describing mixed type of reactions (overt rejection and over-protection) in mothers, says:

> They are strongly ambivalent in their attitude toward their marital partners, toward their children, and therefore toward themselves. They vacillate constantly between love and hate and between submissiveness and aggressiveness (1931, p. 941).

How Children Behave: Ginsburg (1933) studied twenty-five hyperactive children and found that 84 per cent of the mothers evidenced overt rejection of the patients. She further found that 68 per cent of the homes showed marked marital discord and 68 per cent of the mothers were nervous, high-strung, insecure or emotionally unstable. She concluded that hyperactivity in children was directly proportional to the insecurity they felt. Flugel (1931) describes a cause and effect relationship when he says:

> A stern or bullying father, a nagging or over-anxious mother will thus frequently produce a rebellious son or daughter who will respect neither the advice or commands of the parents themselves nor those of their (mental) substitutes in later life (1931, p. 22).

Aichorn, describing the delinquents referred to above, says:

> Every case showed school retardation up to three years. The delinquencies consisted of truancy, impossible behavior in school, thievery at home, in school and on the street. All had been handled in loveless fashion and had suffered under unreasonable sternness and brutality. In none of the children was the need for tenderness satisfied (1925, p. 3).

Healy, Bronner and Bowers (1930, p. 23), in their review of psychoanalytic literature, say, "Lack of tender response, feelings of not being loved may make it difficult for the child to discard his aggressive impulses."

Poor school achievement, irrespective of tested ability, seems to be characteristic of rejected children. Levy (1933), in a study of "pure" over-protection in contrast to rejection, found in the rejection group some retardation in arithmetic and marked retardation in reading. Many of the behavior traits listed are seen in children with neurotic tendencies. Healy (1930, p. 35), et al., in the review cited above,

says, "Quarrels between parents and unhappy marital relations, Freud says, stimulate the child's emotional life and lead it to experience 'intensities of love, hate, and jealousy'. This situation, he says, determines 'the severest predisposition for disturbed sexual developments or neurotic diseases in children."

Pearson, in describing the factors which influence the emotional development of children, says:

> The child of the rejective mother has suffered such accentuations of anxiety that he is too sensitized to be able to withstand the anxiety producing situations of the next state. The end result (is) an overwhelming of the child, with inability to make progress and the development of a maladjusted personality (1931, p. 693).

Knight (1933), studying a group of aggressive children and comparing them with a group of submissive children, found marked differences in the maternal attitudes, which in the submissive group were almost entirely over-protective and in the aggressive group markedly rejecting. Levy, in a discussion of maternal over-protection, describes a correlation between the mother's handling and the child's personality as follows:

> So far, it appears that when maternal over-protection is primarily and successfully dominating in character, submissive traits result--obedience, authority-acceptance, dependence on others; in boys, effeminancy. Where primarily indulgent in character, aggressive traits result--authority-reception (sic), commanding, bullying, and 'limelight' behavior (1930, p. 900).

Children's Attitudes: Pearson says:

> If she (the mother) does not want the child, has not real love or affection for him, he will not only sense this attitude through her handling of him, but will feel it very markedly in the way she institutes training methods (1931, p. 695).

Again later, he says:

> A similar situation occurs if the mother attempts to compensate for dislike of the child by undue protectiveness and care. Although on the surface she may seem a very good mother, the child feels the effect of the underlying unconscious attitude in her training procedures (1931, p. 697).

Ferenzi (1928, p. 128), describing two patients who "came into the world as unwelcome guests of the family," said, "All the indications show that these children had observed the conscious and unconscious signs of the aversion or impatience of the mother and that their desire to live had been broken by this."

Summary

It would seem that maternal rejection is primarily a result of the mother's unhappy adjustment to marriage. This in turn is usually a result of immaturity and emotional instability on the part of one or both parents. These mothers express their rejection by undisguised forms of neglect and cruelty, by over-protection as a reaction to feelings of guilt, or by an inconsistency of handling, characterized by a mixture of these two methods. The children in turn, suffer from an unstable environment and inconsistent handling. Feeling more insecure than the average child, they are impelled by the necessity of extracting from their parents and other adults expressions of being welcome or important. Thus, they are peculiarly sensitive to attention. They derive a certain satisfaction from having their mother upset about them and much of their specific behavior represents a discovery on their part of what their mothers fear the most.

Emotional Determinants of Intelligence

One of Rapaport's (1945, p. 124) nine assumptions reads as follows: "The maturation process is one aspect of personality and is guided, fostered, or restricted by the emotional development which takes place."

We are barely beginning to realize the extent of emotional penetration into otherwise unimpaired intellectual functioning. "Intelligence," Murphy (1945, p. 1) writes, "is fettered by the manacles whose design has been imperfectly studied." This statement by a psychologist, the work of Rapaport and his associates, Goldfarb's (1943) investigation of orphanage children deprived of emotional stimulation, and the observations of emotional interference with intellectual functioning in the psychoses, all point to an increasing realization of the need to identify these "manacles," their modes of fettering intelligence and ways to free intelligence from them.

Such studies may lead to a revaluation of certain statistical findings. For instance, they may show whether lower than average IQ's reported in many tested groups of juvenile delinquents are really indications of poor natural endowment, as was believed, or the result of the male emotional deprivations, frustrations, and insecurities which are expressed in the delinquent behavior. They may show whether the lower IQ's of Negro groups as compared to white groups really indicate any sort of racial "inferiority" or are the outcome of restricted stimulation in the educational environment during the earliest formative years, a possibility which might well be in keeping with Rapaport's

(1945) assumptions. These questions cannot at present be answered unequivocally but the fact that they have been raised is a healthy departure from too ready and rigid an identification of the IQ with innate potentialities.

In reviewing the emotional determinants in any individual instance of mental retardation as a part of the "personal profile," it is well to distinguish between two types of emotional impacts. They cannot perhaps be always kept too strictly apart because, as the person presents himself to us, they have been amalgamated and integrated in his personality. But even a rough analysis will bring some of the essential difference to light:

1. Emotional impact resulting from impaired functioning.
2. Emotional impacts "fettering" and masking otherwise satisfactory endowment.

The manner in which the mentally retarded are treated at home and in institutions is by no means irrelevant. The child who has been surrounded with affection and handled with fond patience is usually calm, secure, affable, composed. The child who has been rejected, coerced, beaten, and pushed around is usually restless, insecure, aggressive and hostile. This, after all, is the general rule even with regard to domestic animals.

The emotional impact on the intellectually inadequate produced by the attitudes of parents, teachers, classmates, playmates and neighbors does not differ fundamentally from the impact on intellectually average children exposed to similar attitudes. The main difference is, of course, that delayed development of early functions, especially

speech, and inability to progress in the school grades offers added motives for parental anxieties, disappointment, and disapproval. These feelings communicated to the child, either drive him to rebellion and retaliatory behavior or to be crushed and defeated resignation with a deferred externalization of accumulated hostility.

Levy (1943, p. 182) was able to correlate numerical (arithmetical) disabilities with maternal over-protection. He wrote: "Several mothers who coached their sons with homework had to leave the arithmetic problems to the child in the more advanced grades because they found the work beyond them." Severe deficiency in numerical orientation may indeed arise on the basis of complex emotional problems.

Blanchard (1935); Missildine (1946); Gann (1945); Tulchin (1935); and Kirkpatrick (1939) all found that at least certain types of severe specific reading disability, often mistaken for feeble-mindedness, are emotional problems of great etiological significance. Blanchard states:

> Children learn at first to please parents, and then teachers who are loved, to secure love and approval in return. If the attitude toward parents is negative rather than positive, interest in learning is decreased thereby, or refusal to learn results, in cases of extreme negative feelings (1935, p. 372).

There are unquestionable emotional interferences not only with selective areas of learning but also with the totality of intellectual functioning. Goldfarb's (1945) study furnishes evidence of this. Despert and Pierce (1946) found increases in the IQ as definite by-products of a play therapy program. Hackbush and Klopfer wrote:

> The rejection of a child by his mother, or the removal of a child from his own mother, for whatever reason, inevitably causes some degree of emotional trauma. Babies who are

> illegitimate or whose mothers are incompetent frequently are raised in institutions from infancy--institutions which may be praised highly from a hygienic standpoint but which frequently pay little attention to the psychological needs of children. As a result, the child suffers extensive disturbance of crippling of his personality and, as a by-product of this, is actually thwarted in his mental development (1946, p. 18).

Rorschach studies have been particularly helpful in bringing out the emotional blocking and points of therapeutic aim in many children who had been considered innately feebleminded.

Sloan (1947) and Jolles (1947), among others, have made important contributions with the use of this method.

Infantile autism shows itself in extreme withdrawal and obsessiveness beginning as early as in the first two years of life. These children, whose condition probably represents the earliest possible form of schizophreniz, come of intelligent and occasionally successful parents who are in good economic circumstances and of homes in which every necessary provision has been made for material comfort. Nevertheless, we find almost invariably that the children have been brought up in emotional refrigerators in which there was extremely little fondling and cuddling, in which the infants had been treated more as coldly watched and preserved experiments than as human beings enveloped in the warmth of genuine parental affection.

Pseudo-Mental Retardation

During the last two decades numerous articles on the problem of pseudo-mental retardation (pseudo-feeblemindedness) have appeared. Implicit in the relevant literature is the fact that the diagnosis of pseudo-feeblemindedness is retrospective and involves an earlier error

in diagnosis. For a long time workers in the field of mental deficiency have been aware of various conditions which may easily mislead the clinician into making a diagnosis of mental deficiency, (e.g., Burnham, 1942; Burt, 1921; Rosenstein, 1933; Witmer, 1922; Vanuem, 1935), when in fact the particular children thus diagnosed are not truly mentally deficient. Such children have been called "pseudo-feebleminded." In the literature there have appeared several articles dealing with this problem, viz., Richardson and Jerrod, 1965; Altable, 1948: Arthur, 1947; Bijou, 1947; Hardy, 1948; Hartogs, 1948; Kanner, 1948; Safian, and Harms, 1948; Waskowitz, 1948. Porteus (1941, p. 203) states that: "Very wide differences in intellectual status merely indicate that the first diagnosis was wrong. A child who finally functions at a normal level proves thereby that he never was feebleminded."

Although views about the nature of pseudo-feeblemindedness are varied, the assumption underlying most of them is that mental deficiency is an incurable condition. Strongly correlated with this attitude is the belief in the constancy of the IQ, a belief which the work of Dearborn and Rothney (1941), Honzik, et al (1948) and others has shown to be incorrect for the majority of individuals during the course of mental development. Cassel (1949) advances three main explanations for the mistaken diagnosis of mental deficiency: "insufficient examination by the clinician," "delayed development," and "the confusion of some other forms of mental deviation with mental deficiency." While Porteus (1941, p. 205) writes: "Nothing that has been advanced so far gives encouragement to the hope that the really dull may become bright or the feebleminded become normal," the results of research since about

that time make such a position untenable now. Various investigators (Charles, 1953; Clarke and Clarke, 1953; Clarke and Clarke, 1954; Guertin, 1949; McKay, 1942; Sarason, 1949; Spaulding, 1946) have shown that some mental defectives (in whom no organic pathology can be demonstrated) advance towards or into the range of intellectual normality. Yet, as several writers have pointed out, children who later show accelerated mental growth seem to have been no different from "ordinary" feebleminded children of the same general functional level when the mental deficiency is necessarily a permanent condition (like the belief in the constancy of the IQ) cannot be sustained in all cases.

An investigation by Clarke and Clarke (1954, 1953) has indicated very clearly one powerful factor in the delayed development of those studied. In the large sample available, it was found that IQ increments occurred over short time periods (two years) in adolescent and young adult morons who had a history of early very adverse environment (parental cruelty, neglect, etc.). Those whose history did not include such unfortunate conditions rarely altered in intellectual level during this period. These findings suggest that an early adverse environment (assessed by highly reliable objective criteria) has a crippling effect on mental development. When the young person is withdrawn from these circumstances, the retardation begins to fade and IQ increments thus increase. Many investigators would have considered these subjects to have been pseudo-feebleminded, yet once again they were originally no different in level of functioning from their fellows who subsequently remained unchanged in cognitive status. No item of test performance nor of behavior could predict the IQ increments which

occurred: the original IQ's of those who later improved reflected their true abilities at the time of testing. The only observable difference lay in the records of their early experiences; those with the worst social histories were shown to have the best prognosis in the sample studied.

It must not be thought that the large changes demonstrated by several workers only occur at the level of mental deficiency. Many excellent longitudinal studies of the development of normal children indicate that large increments or decrements over long periods of time are not uncommon. It has been suggested by Honzik, et al (1948) that some of these are reflections of events in the life situation of the child concerned. No one has suggested, however, that the average child who later advances to the superior level should be termed "pseudo-average," probably because the change does not seem to be inconsistent with common observation of mental growth. Yet a similar change by mental defectives is often regarded as an indication that the child was originally not feeble-minded, that an error in diagnosis was made, and that there was no "real" change at all. This difference in attitude to what are essentially similar phenomena reflects the pessimism with which mental deficiency has for so long been regarded.

As Cassel (1949) points out, in practice the diagnosis of mental deficiency carries with it the prognosis of mental deficiency. It is arguable, however, that what we are dealing with is not merely, on the one hand, "true" mental deficiency and, on the other, pseudo-feeble-mindedness, but rather, two types of developmental arrest, the one permanent and the other impermanent. Mental deficiency is not a single

type of sub-normality but a variety of conditions subsumed under the same broad heading in all cases implying a considerable degree of mental arrest. Different causes often produce the same symptoms (e.g., headache) and this can be true of mental deficiency where the symptoms may be low IQ, social incompetence, abnormal behavior and so forth. Because the symptoms are the same, it does not necessarily follow that etiology, duration of the disorder and prognosis are the same.

Mental defectives of non-organic pathology, like others of normal mentality, are not necessarily static but capable of change within limits which are not as yet precisely ascertained nor are the factors influencing and limiting such changes really understood. Herein lies an important and fruitful field for research.

Wechsler Intelligence Scale for Children (WISC)

Differences between Verbal and Performance Mean Test-Age: The most obviously useful feature of the Wechsler scales is their division into a verbal and performance part. Its a priori value is that it makes possible a comparison between the subject's facility in using words and symbols and his ability to manipulate objects, and to perceive visual patterns. In practice this division is substantiated by differences between posited abilities and various occupational aptitudes.

Apart from their possible relation to vocational aptitudes, differences between verbal and performance test scores, particularly when large, have a special interest for the clinician because such discrepancies are frequently associated with certain types of mental pathology. Whenever a mental disorder produces a change in the individual's

functioning capacity, the resultant loss is generally not uniform, but affects certain abilities more than others. This fact is frequently made use of in a crude way in psychology where specific disturbances or defects are considered pathognomic symptoms of various disease entities. Insofar as the diagnostic significance of large differences between verbal and performance ability as a whole is concerned, the general finding is that in most mental disorders impairment of functioning is greater in the performance than in the verbal sphere. This holds for psychoses of every type, organic brain disease, and to a lesser though still large degree, in most psychoneuroses. On the other side of the fence there are only two groups. One is the adolescent psychopath (without psychosis) and the other the high grade mental defective. Both of these do better on performance than on the verbal tests. It is interesting to note that both psychopaths and mental defectives differ from other psychopathic states in that they represent failure of functioning due to a "lack of" rather than a disturbance or disorganization of functioning ability.

In appraising differences between verbal and performance test scores one must naturally allow for variability even among normal individuals. The amount as well as the direction of the differences also varies with the age and intelligence level of the individual. Subjects of superior intelligence generally do better on the verbal, and subjects of inferior intelligence do better on the performance part of the examination. There are also racial (group) and cultural differences. For example, experience shows that the psychometric pattern of Negro subjects need special interpretation. All this means, of course, that a

significant difference between a subject's verbal and performance score cannot be interpreted carte blanche but only after due weight has been given to the various factors which may have contributed to it.

Wechsler (1944) has offered typical test characteristics of various clinical groups. In terms of differences between verbal and performance test scores, he finds that the following results apply:

1. Organic Brain Disease - Verbal score higher than Performance score
2. Schizophrenia - Verbal score generally higher than Performance score
3. Neurotics - Verbal score generally higher than Performance score
4. Psychopaths (Adolescent) - Performance score generally higher than Verbal score
5. Mental Defectives - Performance score generally higher than Verbal score

Mean Test-Age: The WISC has one serious weakness in the fact that Wechsler has abandoned the mental age concept without providing an entirely satisfactory substitute for it. He misses the point that mental age scores serve one useful purpose in the process of test interpretation for which he has not provided a suitable substitute. With his renunciation of the mental age concept, Wechsler has also discarded any simple method of defining the level of test performance except in relation to the performance of other children of the same chronological age as that of the subject tested. It is useful to compare children and their age mates, but it is also useful in certain situations to be able to make comparisons of a particular child's test performance with children older or younger than himself.

Although one of the advantages originally claimed for the Wechsler scale was that it did not use the mental-age concept, it has since been found desirable to use mental-age equivalents. The relatively low reliabilities of the subtests indicate that there is no merit in merely deriving a test profile for purposes of diagnosis and guidance. The reliabilities of part-scores must be high before profiles can be used with confidence. Furthermore, conversion of raw scores into scaled scores required an artificial juggling of scores to meet normal distribution requirements. Consequently, this study reports research Ss scores in mean test-age rather than scaled scores since it was felt that they were more truly representative of ability and not influenced by artificial weighing.

CHAPTER II

THE PROBLEM

This study is an investigation of relationships between intellectual functioning in the retarded range on the Wechsler Intelligence Scale for Children (WISC) and attitudes toward family relationships. Intellectual functioning in the retarded range was defined as a Full Scale IQ score on the Wechsler Intelligence Scale for Children of 80 or below. Behavior and attitudes toward family relationships was investigated using a questionnaire utilized by Nye (1958). Comparisons were made between two groups scoring in the retarded range of intellectual functioning who differed significantly in differences between Verbal and Performance Mean Test-Age and those who did not differ significantly between Mean Test-Ages and the groups' performance on Nye's Questionnaire of Family Relationships. Both behavior and attitudes toward family relationships were analyzed in terms of freedom and responsibility, discipline, value agreement, money, parental appearance, family recreation, acceptance-rejection of parents of child, parents as information, rejection-aceptance by parents, and parental disposition and character.

Although classification of the mentally retarded has traditionally been in terms of defective maturation, learning, and

social adjustment, Benda (1952) and Benoit (1959) have given credence to classifying the mentally retarded on the basis of emotional factors interfering with intellectual functioning.

Current research (Rapaport, 1945; Murphy, 1945; Goldfarb, 1945; Levy, 1943; Blanchard, 1935; Missildine, 1946; Gann, 1945; Tulchin, 1935; Kirkpatrick, 1939; Goldfarb, 1945; Sloan, 1947; Jolles, 1947) suggests that emotional factors can interfere with intellectual functioning and that they can be investigated.

One of the basic tenets of developmental psychology is the thesis that the early familial environment of the child, especially the prevading parental attitude or emotional tone of the parent-child relationships, is a fundamental factor influencing the development of personality and intellect. Clinical data (Jackson, Klatskin, Wilkin, 1952; Martin, 1942; Newell, 1934; Symonds, 1938; Brown, 1942; Chwast, 1956; Hattwick and Stowell, 1936; Zucker, 1943) offer strong support to the theory of a correlation between parent-child relationships and the nature of children's personality or relative adjustment. The present study compared adolescents' behavior and attitudes toward family relationships among mental retardates.

Wechsler (1944) has suggested that large differences between verbal and performance test scores are associated with certain types of mental pathology. He suggests that a difference of more than 10 IQ points between verbal and performance scores has been found to be associated with mental disorder impairment interfering with intellectual functioning. Research suggests mental age or Mean Test-Age in terms of month-year notation is a more appropriate arithmetical device for scoring

subtests and a more appropriate method of equating and comparing test scores on the WISC than scaled and IQ scores since comparison of subtest raw scores are unaffected by the weighing of these scores and give a more accurate picture of measured ability. The large differences between Verbal and Performance Mean Test-Age is believed to be one piece of evidence for intellectual blocking. From the discrepancies between Verbal and Performance Mean Test-Age and the relatively elevated or depressed achievement on the Wechsler scale subtests by the several groups, there is a recognition that "greater than" or "high", "low", and similar terms are insufficient unless backed up by numbers whose probability of occurrence by chance alone is determined.

A review of the literature indicates that in spite of the basic conceptual difference between the various concepts of pseudo-feeblemindedness there is general agreement as to the practical implications of pseudo-feeblemindedness and that some children are incorrectly diagnosed as mentally deficient (Burnham, 1924; Burt, 1921; Rosenstein, 1933; Witmer, 1922; Vanuem, 1935; Altable, 1948; Arthur, 1947; Bijou, 1947; Hardy, 1948; Kanner, 1948; Safian and Harms, 1948; Waskowitz, 1948; Doll, 1941, Guertin, 1949; Heath, 1941; Cassel, 1949, Wildenskov, 1934). Although insufficient examination is given generally as the reason for incorrect diagnosis, there is no research investigating specific environmental conditions or children's behavior and attitudes toward family relationships to help furnish information so as to minimize a faulty diagnosis of mental retardation or pseudo-mental retardation.

It would seem that the question concerning the relationship between intellectual functioning as a function of family relationships and the resultant faulty diagnosis of mental retardation warrant research exploration. Specifically, one might hypothesize that a systematic relationship exists between intellectual functioning and adolescents' behavior and attitudes toward family relationships. In order to investigate this relationship, one must be in a position to quantity these variables. In terms of family relationships, one device is available in questionnaire form utilized by Nye (1958)--a questionnaire that represents a procedure for disclosing behavior and attitudes toward family relationships from the child's viewpoint. In terms of intelligence, Wechsler Intelligence Scale for Children has been used extensively as a measure of intellectual functioning and is currently viewed as one of the two most valid and reliable instruments for investigating intellectual functioning.

The family is considered to be only one single factor in influencing ability to function intellectually and personality formation. This is not to maintain that it is the only significant group in this respect. Thus, the present study does not encompass all variables related to intellectual and personality functioning. It studies a variable believed to be significant for reaching maximum intellectual potential, that of parent-adolescent relationships, in some detail.

Statement of the Problem

The aim of the present study was to examine the relationship between intellectual functioning of adolescents who function in the

mentally retarded range and their behavior and attitudes toward family relationships. It was hypothesized that adolescents in the Large Difference Group, i.e., those who differ significantly in their report of family relationships from those adolescents in the Small Difference Group, i.e., those who did not differ significantly between Verbal and Performance Test-Age.

Another major concern of this investigation was to determine if there were consistent differences between the Large Difference Group and the Small Difference Group in performance on the subtests of the Wechsler Intelligence Scale for Children.

Hypotheses

It was hypothesized that:

1. Adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC will perceive more rejecting attitudes toward parents than adolescents with Small Differences on the WISC.

2. Adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC will perceive parents as significantly more rejecting than adolescents with Small Differences on the WISC.

3. Adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC will perceive significantly more unfair discipline from parents than adolescents with Small Differences on the WISC.

4. Adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC will perceive parents as allowing significantly more freedom and assuming less responsibility than adolescents with Small Differences on the WISC.

5. Adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC will perceive significantly less family recreation than adolescents with Small Differences on the WISC.

6. Adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC will be significantly more critical of parents' appearance than adolescents with Small Differences on the IWSC.

7. Adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC will perceive parents' disposition and character as significantly more unfavorable than adolescents with Small Differences on the WISC.

8. Adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC will have significantly less value agreement with parents than adolescents with Small Differences on the WISC.

9. Adolescents with Large Differences between Verbal and Performance Mean Test-Age will perceive parents as less generous with money than adolescents with Small Differences on the WISC.

10. Adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC will perceive parents as giving significantly less information and advice than adolescents with Small Differences on the WISC.

CHAPTER III

METHOD

Subjects

The subjects in this study consisted of 20 Caucasian students attending Special Education classes in the Oklahoma City School System. All subjects were given psychometric examinations by the author during a two year period between 1964 and 1966. They were selected on the basis of their differences between Verbal and Performance Mean Test-Age on the WISC: 10 subjects with 10 months or less difference between Verbal and Performance Mean Test-Age and 10 subjects with 16 months or more difference between Verbal and Performance Mean Test-Age. The 20 subjects were selected from 30 students meeting the above criteria.

The research sample consisted of 11 females and 9 males. The subjects with Large Differences between Verbal and Performance Mean Test-Age on the WISC ranged in age from 12 years, 11 months to 16 years, 8 months and in IQ from 64 to 80. The subjects with Small Differences between Verbal and Performance Mean Test-Age on the WISC ranged in age from 12 years, 3 months to 14 years, 3 months and in IQ from 67 to 79.

The occupation of the father was utilized as an index of socio-economic level of the subjects. Data on the occupation of the father are generally more accurately obtainable from adolescents than are such

things as income, years of schooling of the parents, value of the home, rental, and other items with which the adolescent may not be familiar. Without exception, subjects reported father's occupation as falling in the skilled labor and craftsmen type of occupation.

The means and standard deviations for IQ, age, and mean test-age differences for subjects with Large Differences and Small Differences between Verbal and Performance Mental Test-Age are presented in Tables 1 and 2. Reference to Table 3 indicates that the Large Difference Group and the Small Difference Groups do not differ significantly in age or IQ, but do differ significantly in difference between Mean Test-Age on the WISC beyond the .001 level of confidence.

Experimental Procedure

The 20 subjects were individually administered the Wechsler Intelligence Scale for Children and Nye's Questionnaire of Family Relationships.

Wechsler Intelligence Scale for Children: The Wechsler scale consisted of ten subtests grouped into a Verbal and a Performance Scale as follows:

Verbal Scale	Performance Scale
1. General Information	6. Picture Completion
2. General Comprehension	7. Picture Arrangement
3. Arithmetic	8. Block Design
4. Similarities	9. Object Assembly
5. Vocabulary	10. Coding

Administration: Administration of the scale followed standardized procedures given in the Children's Scale (1949).

TABLE 1

MEANS AND STANDARD DEVIATIONS FOR RESEARCH Ss WITH LARGE DIFFERENCES BETWEEN VERBAL AND PERFORMANCE MEAN TEST-AGE ON THE WISC, AGE, AND IQ (N-10)

Variable	$\bar{M}$	S. D.
IQ	73.20	4.70
Age	14.01	1.44
Mean Test-Age Differences	2-9	0-8

TABLE 2

MEANS AND STANDARD DEVIATIONS FOR RESEARCH Ss WITH SMALL DIFFERENCES BETWEEN VERBAL AND PERFORMANCE MEAN TEST-AGE ON THE WISC, AGE, AND IQ (N-10)

Variable	$\bar{M}$	S. D.
IQ	72.70	4.58
Age	13.26	0.79
Mean Test-Age Differences	0-8	0-5

TABLE 3

MANN-WHITNEY U AND SIGNIFICANCE LEVEL BETWEEN LARGE AND SMALL DIFFERENCE GROUPS FOR IQ, AGE, AND MEAN TEST-AGE DIFFERENCE ON THE WISC (N-20)

Variable	U	P
IQ	47	N.S.
Age	28	N.S.
Mean Test-Age Differences	0	.001

Scoring: Raw scores on each subtest were transmuted to Mean Test-Age by a table of equivalent test ages for all raw scores on each of the subtests. The table was developed for each age interval, the raw score corresponding to the scaled score of 10 taken to represent mean test performance for that particular age. The table records test ages for each subtest and for each age interval.

The Full Scale IQ's were found by transforming raw scores on each subtest into normalized standard scores with the subject's own age group. Tables of such scaled scores are provided for every four-month interval between the ages of 5 and 15 years. The scaled subtest scores were added and converted into a deviation IQ with a mean of 100 and a standard deviation of 15. The IQ units chosen are such that approximately 50 percent of the subjects will have IQ's between 90 and 100.

Interpretation: The manual provided a classification based upon the distribution of cases in a normal curve. The verbal descriptions of each category, together with the corresponding IQ limits and the percentage of cases within each category, are given in Table 4. This classification was designed to conform as closely as possible to current usuage in the interpretation of IQ's at different levels.

Each subject was classified according to the Full Scale IQ classification given in Table 4. The difference between Verbal and Performance Mean Test-Age was calculated and assignment made to the appropriate Large Difference Group or Small Difference Group.

TABLE 4

INTELLIGENCE CLASSIFICATION

IQ	Classification	Per Cent Included
130 and above	Very Superior	2.2
120-129	Superior	6.7
110-119	Bright Normal	16.1
90-109	Average	50.0
80-89	Dull Normal	16.1
70-79	Borderline	6.7
69 and below	Mental Defective	2.2

Nye's Questionnaire of Family Relationships. Nye's Questionnaire of Family Relationships (see Appendix) was originally designed to investigate the relationship between juvenile delinquency and family relationships. Consideration of the scale content suggested that a somewhat broader psychological interpretation be placed upon it, making it useful as an assessment device in a situation where an estimate of parent-adolescent relationships is desired.

Administration: The questionnaire was administered to each subject individually. Although the questionnaire was designed as a paper-pencil instrument, it was felt that a "depth-interview" would insure motivation and understanding from the subject. The information from the questionnaire was obtained through conversational means from the subject.

The experimenter had no knowledge of which group any one subject was placed. Since the experimenter had administered the WISC to each subject at least one year prior to administering the questionnaire, rapport was again established with the subject.

Scoring: The value of each question on the questionnaire was marked by the examiner. This insured a constant value system across all questions asked. Each question could be answered on a scale of from 5 indicating "the most" to 1 indicating "the least."

CHAPTER IV

RESULTS

The question which needed to be answered was: "Do adolescents in the Small Difference Group differ significantly from adolescents in the Large Difference Group in their report of family relationships?" In order to test this question the Mann-Whitney method was used as described in Ferguson (1966). The results obtained are found in Table 5.

In Hypothesis 1 it is stated that adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC would perceive more rejecting attitudes toward parents than adolescents with Small Differences in the WISC. Data in Table 5 reveals that the Large Difference Group differed from the Small Difference Group with a difference statistically significant at the .001 level. Thus, the hypothesis that adolescents in the Large Different Group would perceive more rejecting attitudes toward parents than adolescents in the Small Difference Group is confirmed.

In Hypothesis 2 it is stated that adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC would perceive parents as significantly more rejecting than adolescents with Small Differences on the WISC. Data in Table 5 reveals that the Large Difference Group differed from the Small Difference Group with a

TABLE 5

MANN-WHITNEY Us FOR HYPOTHESES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Hypothesis	Nye's Scale	Raw Score LDG	Raw Score SDG	U	P
1. Adolescents Rejecting Parents	1	460	200	9	.001
2. Parents Rejecting Adolescents	2	420	230	6	.001
3. Unfair Discipline	3	360	190	21	.025
4. Freedom and Responsibility	4	210	100	18	.01
5. Family Recreation	5	120	90	25	.05
6. Parents' Appearance	6	201	206	29	N.S.
7. Parents' Disposition and Character	7	182	205	21	.025
8. Value Agreement	8	127	66	27	.05
9. Generous with Money	9	90	92	33	N.S.
10. Information and Advice	10	364	247	24	.05
Composite		253.4	162.6	18	.01

difference statistically significant at the .001 level. Thus, the hypothesis that adolescents in the Large Difference Group would perceive parents as significantly more rejecting than adolescents in the Small Difference Group on the WISC is confirmed.

In Hypothesis 3, it is stated that adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC would perceive significantly more unfair discipline from parents than adolescents with Small Differences on the WISC. Data in Table 5 reveals that the Large Difference Group differed from the Small Difference Group with a difference statistically significant at the .025 level. Thus, the hypothesis that adolescents in the Large Difference Group would perceive significantly more unfair discipline from parents than adolescents with Small Differences on the WISC is confirmed.

In Hypothesis 4, it is stated that adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC would perceive parents as allowing significantly more freedom and assuming less responsibility than adolescents with Small Differences on the WISC. Data in Table 5 reveals that the Large Difference Group differed from the Small Difference Group with a difference statistically significant at the .01 level. Thus, the hypothesis that adolescents in the Large Difference Group would perceive parents as allowing significantly more freedom and assuming less responsibility than adolescents with Small Differences on the WISC in confirmed.

In Hypothesis 5 it is stated that adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC would perceive significantly less family recreation than adolescents

with Small Differences on the WISC. Data in Table 5 reveals that the Large Difference Group differed from the Small Difference Group with a difference statistically significant at the .05 level. Thus, the hypothesis that adolescents in the Large Difference Group would perceive significantly less family recreation than adolescents with Small Differences on the WISC is confirmed.

In Hypothesis 6 it is stated that adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC would be significantly more critical of parents' appearance than adolescents with Small Differences on the WISC. Data in Table 5 reveals that the Large Difference Group did not differ significantly from the Small Difference Group. Thus, Hypothesis 6 is not supported since the number of critical responses of parents' appearance of the Large Difference Group did not significantly differ from the Small Difference Group.

In Hypothesis 7 it is stated that adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC would perceive parents' disposition and character as significantly more unfavorable than adolescents with Small Differences on the WISC. Reference to Table 5 reveals that the Large Difference Group differed from the Small Difference Group with a difference statistically significant at the .025 level. Thus, the hypothesis that adolescents in the Large Difference Group would perceive parents' disposition and character as significantly more unfavorable than adolescents with Small Differences on the WISC is confirmed.

In Hypothesis 8 it is stated that adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC would have significantly less value agreement with parents than adolescents with Small Differences on the WISC. Data in Table 5 reveals that the Large Difference Group differed from the Small Difference Group with a difference statistically significant at the .05 level. Thus, the hypothesis that adolescents in the Large Difference Group would have significantly less value agreement with parents than adolescents with Small Difference on the WISC is confirmed.

In Hypothesis 9 it is stated that adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC would perceive parents as less generous with money than adolescents with Small Differences on the WISC. Reference to Table 5 reveals that the Large Difference Group did not differ significantly from the Small Difference Group. Thus, the hypothesis that adolescents in the Large Difference Group would perceive parents as less generous with money than adolescents with Small Differences on the WISC is not supported.

In Hypothesis 10 it is stated that adolescents with Large Differences between Verbal and Performance Mean Test-Age on the WISC would perceive parents as giving significantly less information and advice than adolescents with Small Differences on the WISC. Data in Table 5 reveals that the Large Difference Group differed from the Small Difference Group with a difference statistically significant at the .01 level. Thus, the hypothesis that adolescents in the Large Difference Group would perceive parents as giving significantly less information

and advice than adolescents with Small Difference on the WISC is confirmed.

A Mann-Whitney U was run to determine if sex difference could have influenced the results obtained concerning the differences in family relationships reported by the Large and Small Difference Groups. Since the number of males and females in the sample differed, it was felt likely that the differences could be accounted for in terms of sex differences. The statistical analysis revealed a Mann-Whitney U of 32 which is not significant. Thus, the difference obtained between the Large and Small Difference Groups was not influenced by sex differences.

A Mann-Whitney U was run to determine if the Large Difference Group differed significantly from the Small Difference Group on over-all performance on 10 subtests of the WISC. It was felt that one group might perform better than the other group on the Verbal Scale as compared with the Performance Scale. Data in Table 6 reveals that the Large Difference Group did not differ significantly in over-all performance on the two scales. Thus, there is no reason to believe that the two groups differ significantly on their over-all performance on the WISC.

A further question was asked as to whether the Large Difference Group differed from the Small Difference Group on performance when each subtest of the WISC was taken individually. Data in Table 6 reveals that the Large Difference Group differed significantly from the Small Difference Group only on the Object-Assembly subtest of the WISC at the .01 level. Thus, the statistical analysis by the Mann-Whitney U method for each subtest of the WISC individually revealed that the Large Difference

TABLE 6

MEAN RAW SCORES AND MEAN TEST-AGE OF RESEARCH Ss PERFORMANCE ON INDIVIDUAL SUBTESTS OF THE WISC (N-20)

Subtest (WISC)	Mean Raw Score LDG	Mean Test-Age LDG	Mean Raw Score SDG	Mean Test-Age SDG	U	P
Information	11.3	9-0	11.2	9-0	43	N.S.
Comprehension	11.5	9-8	11.2	9-8	39	N.S.
Arithmetic	7.7	8-6	7.9	8-6	55	N.S.
Similarities	8.4	9-6	8.1	9-6	41	N.S.
Vocabulary	29.0	9-8	26.1	8-8	36	N.S.
Picture Completion	10.4	9-6	9.5	8-8	40	N.S.
Picture Arrangement	23.7	8-8	22.6	8-6	48	N.S.
Block Design	14.9	9-6	10.3	8-8	44	N.S.
Object Assembly	24.3	13-0	16.2	8-2	13	.01
Coding	42.9	11-10	39.2	10-10	37	N.S.
Composite					35	N.S.

Group differed significantly from the Small Difference Group on the performance of the Object-Assembly subtest of the WISC.

A Mann-Whitney U was run to determine if sex differences could have influenced or over-shadowed the lack of significant differences obtained when the Large and Small Difference Groups were compared on performances of individual subtests of the WISC. The statistical analysis revealed that males did not differ significantly from females on over-all performance on the Verbal and Performance Scales of the WISC nor on performance of the individual subtests of the WISC. Thus, sex differences did not influence the lack of significant difference between the performance of the two groups.

CHAPTER V

DISCUSSION AND CONCLUSION

This study was an investigation of the relationship between intellectual functioning and reported family relationships among adolescent mental retardates. Ten hypotheses were tested to determine whether or not adolescents with a large difference in mental-age on verbal and non-verbal tasks differed significantly from adolescents with a small difference in mental-age on verbal and non-verbal tasks in their report of family relationships.

Eight hypotheses were significantly supported. It was found that adolescents with a large difference in mental-age on verbal and non-verbal tasks differed significantly in that they reported themselves as more rejecting in their attitudes and behavior toward their parents, felt that their parents were more rejecting of them, perceived their parents as rendering more unfair discipline, felt they were given less freedom and responsibility, reported less family recreation as a group, felt their parents' disposition and character was less acceptable, had less value agreement with their parents, and were less likely to use parents as a source of information and advice than adolescents with a small difference in mental-age on verbal and non-verbal tasks.

Two hypotheses were not supported. It was found that adolescents with a large difference in mental-age on verbal and non-verbal

tasks did not differ significantly in their attitudes and behavior toward parents' appearance as being more or less acceptable nor perceived their parents as being more or less generous with money than adolescents with a small difference in mental-age on verbal and non-verbal tasks.

It was found that the two groups only differed significantly in their performances on the Object-Assembly subtest of the WISC. However, a review of the protocols of the research Ss suggests that the lack of significant differences on the performances on the subtests of the WISC was likely influenced by the highly variable abilities demonstrated by some of the subjects. It appeared that some of the subjects in the Large Difference Group had extremely high and low scores on some of the subtests creating average scores that did not differ significantly from subjects in the Small Difference Group. The reported results in Table 6 should not then be taken to mean that the Large Difference Group will always differ significantly only on the Object Assembly subtest of the WISC but rather that the sample population of this study was such that real differences could not be demonstrated statistically. The possibility exists that differences could be demonstrated employing a different sample population.

A considerable number of relationships between family attitudes and behavior and intellectual functioning have been tested which provide support for the hypotheses. Data have been presented which support the idea that the identification with the parents by the child is associated with less variability in intellectual functioning and that need satisfaction through perceived parental behavior is likewise related.

Wide scatter of intellectual ability seems to be at a maximum where there is a large amount of direct control by the parents as perceived by the child. In relation to the latter finding, it is postulated that as direct controls become too pervasive, it becomes impossible for the adolescent to function as an independent person; his needs, therefore, are not met.

Each of the items on Nye's Questionnaire of Family Relationships might be considered a sample from a group of related attitudinal and behavioral items. For example, when an adolescent responds that he often discusses dating problems with his parents, it is probable that he discusses other problems, also. It is likely too, that there is a close parent-child affectional relationship and perhaps shared recreation. The exact nature of this complex cannot always be deduced, but it must be assumed to exist. It cannot be anticipated, therefore, that a change in one specific behavior pattern will affect a considerable change in the dependent variable, in this case intellectual functioning. However, an initial change in one pattern or attitude may result in changes in related behavior and attitudes, so that the change may start a "change reaction." It would be valuable to have more knowledge of this process. At present, assumptions must be made with caution.

Parents who act upon liberal points of view with regard to the mores may grant their children considerable freedom of choice, and action, thereby presumably diminishing the frequency of frustration episodes, or they may, under their very liberalism, mask indifference or an unwillingness to assume responsibility for the child's developmental problems. In the former instance the child gains security through

sharing with the parents an intrinsic self-assurance which permits the relinquishment of rigid shibboleths of child control. In the latter case the child may develop insecurity symptoms through overt or unverbalized perception of the parent's compensated anxieties which may even conceal actual hostility toward the child. It does not require much experience for the child to respond to the absence of that stabilizing strength which serves to integrate the family group.

In such circumstances the child may become bewildered by the lack of a discernible personality and action pattern. He may be forced to make his own definition of the family situation and ways of meeting it, and may develop neurotic symptoms because of an inadequate experiential background for making such difficult social discriminations. The child will often, in so-called liberal homes, manifest behavior problems which prove upon closer examination to be trials of the parent's power. One might hazard a guess that such children goad their parents into expressing authority and hope for their own defeat in order that they may experience the assurance of a strong hand on the familial helm. The psychoanalyst's claim that children sometimes misbehave in order to obtain punishment for an undetected misdemeanor and thereby relieve a feeling of guilt, should be supplemented by the theory that they may also strive to relieve anxiety occasioned by the fear that theirs is not a "real" parent.

The symptom-reducing leniency of the liberal parent may arise out of suppressed hostility against strict parents, broken homes, perfectionism, fear that the child may have inherited a familial weakness, or a host of other reasons. In the conservative family the parent

may arbitrarily dominate or repress the child, thereby engendering frustration-aggression situations, or he may add overtones of warmth and fairmindedness to the dominant motif of his behavioral standards.

Similar considerations must not be overlooked when the term "strict" and "lenient" are used. Strictness may be defined in as many ways as there are facets to the interacting personalities of the child's environment. Whether strictness as such will exercise a beneficial or detrimental influence upon the child's personality depends upon whether it is motivated by anxiety and/or lack of self-confidence in the parent, or whether it is accompanied by self-assurance and fairness.

Leniency may be an expression of parental weakness or a sign of good parent-child relationships. It is not only a question of whether the parent is or is not maladjusted, of equal importance is the type of maladjustment and the nature of its overt expression in the individual's human relationship.

Finally, the manner in which the child perceives the parent's behavioral norms may, in the last analysis, determine its personality make-up. It would appear that this perception is the effective basis of feeling and behavior on the part of the adolescent. One might postulate that adolescents in the Large Difference Group experience emotional deprivation in relationship to parental love. We know that neuroses growing out of such deprivation undoubtedly exist and that children probably do function at an intellectually lower level that is symptomatic of neurosis.

The hypothesis of assuming that psychopathological disturbances can account for gross variability in intellectual functioning should be

considered in light of this investigation. It would seem that an adequate emotional relationship might be important to normal intellectual development. It might be inferred that when infants perceive inadequate mothering and become less accessible to the full benefits of environmental stimulation they fail to develop and make full use of their intellectual potentials and that basic learning in some areas is retarded. The psychoanalysts have emphasized the role of the parent relation in serving as a reward for learning. It is conceivable that without this reward the child is unable to reach his maximum intellectual potential and might function intellectually in the retarded range.

The results of this study suggest that the adolescents in the Large Difference Group could be considered pseudo-retardates. Although as a group they function intellectually in the retarded range, their reported perception of their parents is negative enough that it could be postulated that they experience adverse environmental conditions. Since mental retardation is not a single type of subnormality but a variety of conditions subsumed under the same broad heading in all cases implying a considerable degree of mental arrest, it is not unlikely that adverse environmental conditions could cause, partially at least, symptoms of mental retardation. These findings suggest that an early adverse environment has a crippling effect on mental development. It is probable that what we are dealing with in the sample population are two types of developmental arrest, the one permanent and the other impermanent. If this is true, the Large Difference Group could not legitimately be called mentally retarded but more appropriately pseudo-mentally retarded. It is possible had they developed in an environment perceived as less

threatening they might have been able to reach their maximum intellectual potential.

The present research suggests several specific areas of needed research. This study has analyzed parental social control as perceived by two groups of adolescents who quantitatively differ in their demonstrated intellectual ability. The analysis of parent-adolescent relationships presented here might profitably be developed much more intensively. The role of value, for example, might profit by research through relating specific value hierarchies, as well as value agreement, to intellectual functioning. The interrelationship of family behavior might be developed considerably beyond its present treatment.

In conclusion, the findings in this study support earlier studies which maintain that intellectual functioning is at least partially dependent upon perceived environmental conditions. The results of this investigation give evidence that adolescents who have large differences in mental-age on performance of verbal and non-verbal tasks perceive their relationships with their parents as being significantly more adverse than adolescents with a small difference in mental-age on performances of verbal and non-verbal tasks.

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APPENDIX

NYE'S QUESTIONNAIRE OF FAMILY RELATIONSHIPS

SOCIO-ECONOMIC LEVEL

1. Does your (mother/father) go to church or Sunday School? (1) No ____, (2) Once or twice a year ____, (3) About once a month ____, (4) Two or three times a month ____, (5) Regularly every Sunday ____, (6) No father/mother ____.

2. Do you go to church, Sunday School, or young people's meetings? (1) No ____, (2) Once or twice a year ____, (3) About once a month ____, (4) Two or three times a month ____, (5) Regularly every Sunday ____.

3. In your family are you (1) The eldest ____, (2) In between ____, (3) The youngest ____, (4) An only child ____.

4. How many children are there in your family including yourself? (Don't count any who are dead) (1) One ____, (2) Two ____, (3) Three ___, (4) Four ____, (5) Five ____, (6) Six ____, (7) Seven ____, (8) Eight ___.

5. Where was your father born? (1) In Oklahoma ____, (2) In another state ____, (3) If none of these, where ____?

6. A. Where in town do you live?
   Section _____
   Block _____
   Street _____
   B. If not in town, how far from town ____?
   C. In what direction from town _____?

7. With whom do you ordinarily live? (1) Original father and mother ___, (2) Mother and step-father ____, (3) Father and Step-mother ____, (4) Mother only ____, (5) Father only ____, (6) Foster parents (adopted) ____, (7) If none of these, who? ____.

8. If your parents are divorced or separated, how old were you when they last lived together? (1) 5 or younger ____, (2) 6-11 ____, (3) 12-16 ___, (4) 17 or older ____.

9. From what you have observed, would you say that your mother? father is: (1) Completely happy in (his.her) marriage ____, (2) Generally happy and satisfied ____, (3) Happy about some things, unhappy about others ____, (4) More unhappy than happy ____, (5) Very unhappy and dissatisfied ____.

10. My parents disagree (but don't get mad): (1) Very often ____, (2) Often ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

11. My parents quarrel (get mad): (1) Very often ____, (2) Often ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

12. Does your mother (or stepmother) ordinarily work at a job for money? (1) No ____, (2) Yws, part time ____, (3) Full time ____, (4) No mother ____.

13. In how many communities have you attended school? (1) One ____, (2) Two ____, (3) Three ____, (4) Four ____, (5) Five ____, (6) Six ____, (7) Seven ____, (8) Eight ____, (9) If more than eight, how many ____.

14. What does your father (or stepfather) do for a living? _____, No father ____.

15. How long do you expect to live in this area? (1) Less than 1 year ____, (2) 1 to 5 years ____, (3) At least 5 years ____.

REJECTION OF PARENT BY CHILD

1. Do you enjoy letting your (mother/father) in on your "big moments?" (1) Very much ____, (2) Somewhat ____, (3) Hardly at all, ____, (4) Not at all ____.

2. Do you enjoy talking over your plans with your (mother/father)? (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

3. Where you are concerned, do you think "what (mother/father) doesn't know won't hurt (her/him)? (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

4. Have you ever felt ashamed of your (mother/father)" (1) Often ____, (2) Sometimes ____, (3) Once in a while ____, (4) Seldom ____, (5) Never ____.

5. Do you enjoy doing extra things to please your (mother/father) that you are not required to do? (1) Often ____, (2) Sometimes ____, (3) Seldom ____, (4) Never ____.

6. If it were possible to change real parents into ideal parents, what would you change? (1) Just about everything ____, (2) A large number of things ____, (3) A few things ____, (4) One or two things ____, (5) Nothing ____.

7. Do you confide in your (mother/father) when you get into some kind of trouble? (1) All problems ____, (2) Most ____, (3) Some ____, (4) Few ____, (5) None ____.

8. Do you feel rebellious around your (mother/father)? (1) Always ____, (2) Often ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

9. In general, do you feel that you get a "square deal" with your (mother/father)? (1) Always ____, (2) Usually ____? (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

10. Do you think "eh, what's the use" after you have tried to explain your conduct to your (mother/father)? (1) Often ____, (2) Sometimes ____. (3) Seldom ____, (4) Never ____.

11. Are you interested in what your (mother/father) thinks of you? (1) Very much ____, (2) Somewhat ____, (3) Hardly ____, (4) Not at all ____.

REJECTION OF CHILD BY PARENTS

1. My (mother/father) is interested in what I do. (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

2. My (mother/father) ridicules my ideas: (1) Never ____, (2) Seldom ____, (3) Sometimes ____, (4) Usually ____, (5) Always ____.

3. My (mother/father) encourages me to discuss my problems with (her/him): (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Usually ____, (5) Never ____.

4. I think my (mother/father) has my best interests at heart: (1) Never ____, (2) Seldom ____, (3) Sometimes ____, (4) Usually ____, (5) Always ____.

5. I think my (mother/father) shows more interest in by brothers and sisters than (she/he) shows in me: (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____, (6) More in me ____, (7) Only child ____.

6. Other (mothers/fathers) tend to show more interest in their children than my (mother/father) shows in me: (1) Completely agree ____, (2) Partially agree ____, (3) Equal interest ____, (4) Partially disagree ____, (5) Completely disagree ____.

7. My (mother/father) praises me when I do my work well: (1) Always ___, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

8. Does your (mother/father) ever seem to wish you were a different sort of a person: (1) Very often ____, (2) Frequently ____, (3) Sometimes ___, (4) Seldom ____, (5) Never ____.

9. Do you think your (mother/father) tries to understand your problems and worries? (1) Never ____, (2) Seldom ____, (3) Sometimes ____, (4) Usually ____, (5) Always ____.

10. My (mother/father) says and does things that make me feel that I am not trusted: (1) Very often ____, (2) Frequently ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

DISCIPLINE AND PUNISHMENT

1. When my (mother/father) punishes me (she/he) is fair about is. (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

2. With respect to discipline, do you think your (mother/father) is more lenient with your brothers and sisters than with you? (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____, (6) No brothers or sisters ____.

3. With regard to disciplining me, my (mother/father) is: (1) Very easy ____, (2) Fairly easy ____, (3) Fairly strict ____, (4) Very strict ____.

4. Does your (mother/father) ever tell you she is going to punish you if you do something and then doesn't punish you? (1) Very often ____, (2) Frequently ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

5. My parents explain why they punish me. (1) Never ____, (2) Seldom ____, (3) Sometimes ____, (4) Usually ____, (5) Always ____.

6. When I get into difficulties that make my parents angry, my father listens to my side of the "story." (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

7. When I do something my parents don't like they nag me: (1) Never ____, (2) Seldom ____, (3) Usually ____, (4) Always ____.

8. When I do something my parents don't like they scold me: (1) Always ____, (2) Usually ____, (3) Seldom ____, (4) Never ____.

9. When I do something my parents don't like they make me feel they don't love me: (1) Always ____ (2) Usually ____, (3) Seldom ____, (4) Never ____.

FREEDOM AND RESPONSIBILITY

1. With regard to "evenings out," my parents allow me: (1) Every evening out if I wish ____, (2) Some school nights ____, (3) Only week-end evenings ____, (4) Just an occasional evening out ____, (5) Almost no evenings out ____.

2. Do you, yourself, own a car? (1) Yes ____, (2) No ____. If no, can you use the family car? (3) No ___, (4) Occasionally ___, (5) Usually ____, (6) Always ____.

3. My parents give me as much responsibility as I'd like to have: (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

4. My parents respect my opinions and judgment: (1) Never ____, (2) Seldom ____, (3) Sometimes ____, (4) Usually ____, (5) Always ____.

5. When requiring me to do something, my parents explain the reason: (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

FAMILY RECREATION

1. For fun and entertainment my parents and I do things together at home (not counting watching T.V.). (1) Not at all ____, (2) About once a month ____, (3) About once a week ____, (4) More than once a week ____.

2. My parents and I go together to ball games. (1) Not at all ____, (2) About once a year ____, (3) Two, three, or four times a year ____, (4) More than four times a year ____.

3. Father and I go on picnics in the summer. (1) Not at all ____, (2) Once or twice during the summer ____, (3) Three, four, or five times during the summer ____.

4. Mother and I go on trips together. (1) Never ____, (2) About once a year ____, (3) A few times a year ____, (4) Once a month or oftener ____.

PARENTAL APPEARANCE

1. Which of the following is true for your parents? Clothes out of style: (1) Always ____, (2) Usually ____, (3) Seldom ____, (4) Never ___.

2. Are you ever embarrassed by your father's appearance? (1) Never ___, (2) Seldom ____, (3) Sometimes ____, (4) Frequently ____.

3. Father goes around house and yard in an undershirt: (1) Always ___, (2) Frequently ____, (3) Seldom ____, (4) Never ____.

4. Which of the following is true for your parents? Clothes clean: (1) Never ____, (2) Seldom ____, (3) Usually ____, (4) Always ____.

5. Mother lets her slip show: (1) Never ____, (2) Seldom _____, (3) Frequently ____, (4) Always ____.

6. In what kind of physical condition do your parents keep themselves: (includes overweight, underweight, etc.) (1) Very good condition ____, (2) Quite good condition ____, (3) Fair condition ____, (4) Poor condition ____, (5) Very poor ____.

PARENTAL DISPOSITION AND CHARACTER

1. How much of the time is your (mother/father) cheerful? (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

2. How easy is it to get your (mother/father) upset? (1) Very easy ____, (2) Fairly easy ____, (3) Rather difficult ____, (4) Very difficult ____.

3. How often does your (mother/father) lose (her/his) temper with you? (1) Very often ____, (2) Frequently ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

4. Parents usually want their children to tell the truth. Have you ever felt that your (mother/father) was not telling the truth (herself/himself)? (1) Never ____, (2) Sometimes ____, (3) Often ____, (4) Very often ____.

5. How honest do you feel your parents are? (1) Always honest ____, (2) Usually honest ____, (3) Sometimes dishonest ____, (4) Usually dishonest ____.

VALUE AGREEMENT

1. On the importance of religion I agree with my parents. (1) Completely agree ____, (2) Mostly agree ____, (3) Mostly disagree ____, (4) Completely disagree ____.

2. On the importance of religion I agree with my parents. (1) Completely agree ____, (2) Mostly agree ____, (3) Mostly disagree ____, (4) Completely disagree ____.

3. On the importance of being honest I agree with my parents. (1) Completely agree ____, (2) Mostly agree ____, (3) Mostly disagree ____, (4) Completely disagree ____.

4. In general, on what is right and wrong I agree with my parents. (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

GENEROSITY OF PARENTS

1. Are the parents of your friends more or less generous than your parents? (1) Much more ____, (2) More ____, (3) About the same ____, (4) Less ____, (5) Much less ____.

2. I think my brothers and sisters get more money than I get from my parents: (1) Always ____, (2) Usually ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____, (6) No brothers or sisters ____.

3. What is the total amount of money from all sources that you usually earn or are given each week (during the school year)? (1) Nothing ____, (2) Less than 25¢ ____, (3) 26¢ to 50¢ ____, (4) 51¢ to $1 ____, (5) $1.01 to $2 ____, (6) $2.01 to $5 ____, (7) $5.01 to $10 ____, (8) $10.01 to $25 ____, (9) Over $25 ____.

USING PARENTS AS INFORMATION AND ADVICE

1. How much do you feel your parents know about dating? (1) A great deal ____, (2) A good deal ____, (3) Very little ____, (4) Nothing ____.

2. Suppose you wanted some help on the following subject, would you feel you could discuss it with your parents? Dating: (1) Not at all ____, (2) With difficulty ____, (3) Fairly easily ____, (4) Very easily ____.

3. I ask for advice about dating from my parents: (1) Always ____, (2) Frequently ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

4. When thinking about a future job, I ask for advice from my parents: (1) Never ____, (2) Seldom ____, (3) Sometimes ____, (4) Frequently ____, (5) Always ____.

5. How much do you feel your parents know about these subjects? Religion: (1) Nothing ____, (2) Very little ____, (3) A good deal ____, (4) A great deal ____.

6. Suppose you wanted some help on the following subject, would you feel you could discuss it with your parents? Religion: (1) Very easily ____, (2) Fairly easily ____, (3) With difficulty ____, (4) Not at all ____.

7. When I don't understand things about religion, I ask for an explanation from my parents: (1) Never ____, (2) Seldom ____, (3) Sometimes ____, (4) Frequently ____, (5) Always ____.

8. When I have a question about sex I ask for an explanation from my parents: (1) Always ____, (2) Frequently ____, (3) Sometimes ____, (4) Seldom ____, (5) Never ____.

9. When I have trouble doing my school homework I ask help from my parents: (1) Always ____, (2) Frequently ____, (3) Sometimes ____, (4) Seldom ____, (5) Never.____.