THE UNIVERSITY OF MANITOBA

A COMPARATIVE STUDY OF THE SOCIAL MATURITY INDICES OF INSTITUTIONALIZED AND NON-INSTITUTIONALIZED TRAINABLE MENTALLY RETARDED CHILDREN

Being a Report of a Research Project
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Master of Social Work

by

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ABSTRACT

This is a diagnostic/descriptive study designed to compare and analyze the social maturity indices and selected personal history aspects of two sample populations of trainable mentally retarded children; one population residing in a specialized residential institution and attending classes and a comparable group living at home and attending classes. The two universes involved were obtained from the respective enrollment records of the Manitoba School at Portage la Prairie, and the Winnipeg Kinsmen School in the City of Winnipeg.

The research study commenced in September 1966 and terminated in April 1967. It was based on data obtained through the administration of the Vineland Social Maturity Scale and a Personal History Schedule compiled by the research group.

From the data collected, it was found that at the time of the study children residing at home had a higher level of social maturity than children residing in a specialized residential institution. An examination of the findings indicated numerous areas of concern which conceivably might provide fertile areas for further and more comprehensive research projects.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

> Every child, regardless of the nature of his . . . handicap, has the right to develop to the maximum of his abilities, in spite of his disablement. This implies that the child with a . . . handicap, should have ready access to the best medical diagnosis and treatment, allied preparation, and employment. In this way he should be able to satisfy the needs of his own personality to the maximum, and become as far as possible a useful and independent member of the community.[1]

Although the above goal was enunciated by the World Health Organization with specific reference to the physically disabled, it would seem to be equally applicable to the mentally retarded in our society whose opportunities for optimum emotional, social and mental development have heretofore been severely curtailed by prevailing societal stigmatization and by widespread acceptance that their condition was irreversible. During the last few decades, however, there has been a growing awareness of some of the multitudinous factors which contribute to the inability of the mentally retarded to cope with the problems of daily life. It was therefore hoped that this research study, which planned to compare the social maturity levels of two groups of trainable mentally retarded children, a group living in their own home with a group living in a residential institution, might contribute some additional insights about the trainable mentally retarded child which would be useful in future planning and/or research projects.

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[1]Michael J. Begab, The Mentally Retarded Child, U. S. Department of Health, Education and Welfare, Children's Bureau, 1963, p. 130.

Social Maturity. Performances in respect to which children show a progressive capacity for looking after themselves and for participating in those activities which (normally would) lead towards ultimate independence as adults.[2]

Trainable Mentally Retarded. Generally refers to those mental retardates whose disabilities are such that they are incapable of meaningful achievement in traditional academic subjects, but who are capable of profiting from programs of training in self care and in simple, social and job or vocational skills.[3] For our purposes, trainable mental retardation specifically refers to intelligence quotients between 25-30.

The original area of concern for this study, namely the trainable mental retardate in our society, was chosen by the Research Committee of the School of Social Work, University of Manitoba. To this group of novice researchers it seemed apparent that the measurement of social maturity would represent an appropriate method of ascertaining the trainable mentally retarded child's capacity to attain some degree of independent functioning. Moreover, a review of pertinent literature (See Chapter II) revealed that although numerous research studies had been conducted with "normal" children in both institutionalized and non-institutionalized settings, sparse comparable consideration had been accorded the trainable mentally retarded child. Therefore any data or

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[2]Edgar L. French and Clifford J. Scott, Child in the Shadows, J. B. Lippencott, New York, Philadelphia, 1960, p. 74. (A defintion by Dr. Doll)

[3]Rick Heber, "A Manual in Terminology and Classification in Mental Retardation, A Monograph Supplement," American Journal of Mental Deficiency, September 1959, p. 98.

other information which might be forthcoming from a study of this nature, however limited in scope and size, would represent a useful contribution toward further exploratory research.

Generally speaking, the trainable or moderately retarded group, if appropriately trained, are capable of mastering the rudiments of self care and social living and possess as well the ability to acquire some language competence. Sufficient manual skills may be acquired to enable them to perform useful tasks in the home or to seek employment in a sheltered environment. Although heterosexual interest is not usually evidenced by the moderately retarded, any incipient sexual manifestation must be carefully watched, and the responsibilities of marriage, of course, are out of the question. Such children experience difficulty in concentration, in comprehending abstract functions and ideas and in generalizing from one situation to another. Proper incentive and training, however, may enable them to develop sufficient capacities to concentrate upon one specific task.[4]

> The presence of a retarded child in a home presents a variety of complex problems involving all facets of family life and all family members. The nature and level of mental retardation of the child, the socio-economic status of the family, the emotional stability of the parents, the emotional climate the parents create in the home, as well as the community tolerance for the mentally retarded all affect the manner in which parents plan to meet the needs of their retarded child.[5]

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[4]Begab, op. cit., pp. 25-26.

[5]Harvey Stevens and Rick Heber, Mental Retardation - A Review of Research, University of Chicago Press, Chicago, 1964, p. 6.

Traditionally, custodial care was generally recommended to parents of moderately and severely retarded children not only because of the medical and social problems which such children presented, but because of the supposed irreversibility of this condition. As social workers we were concerned not only about the effects which a retarded child might have upon the family and its members, but how the child himself might be affected. We felt that it was our professional responsibility to the community, to parents and to the trainable mentally retarded child himself, to identify some pertinent factors about institutional and home settings which might suggest which environment seemed most capable of facilitating social, emotional and intellectual development. A comparison of social maturity indices seemed to represent an appropriate method of evaluating not only the aforementioned two environments, but of isolating various aspects which conceivably might explain the attainment of a higher level of social maturity in one setting. It was felt that this research project would be valuable if any small remnant of knowledge was extracted which might enable social workers to more effectively assist parents in making a realistic decision about their retarded child.

Moreover, such knowledge would enable the profession to influence governmental and community planning authorities about the type of facilities which seemed to be the most effective in helping the trainable mental retardate to achieve his maximum level of independent functioning. At the time of the study, the Manitoba School, one of the settings which had volunteered its patients as subjects for the purposes of this research project, was unable to meet the demand for services

placed upon it by provincial residents, and the size of the waiting list gave evidence of the inadequacy of the existing facilities. It was felt that there was a paramount need for concrete evidence of the function which such an institution was actually performing in the community as it was envisaged that regardless of the outcome of this or of any other research project concerning institutional versus home care, a need for similar facilities would always exist, as only institutions were in a position to offer the constant medical and custodial care which many mental retardates would always require. Another aspect of the institutional versus home care controversy, which seemed to have special significance for the trainable mentally retarded group, was the inescapable fact that the majority of these retardates would never be able to function as normal, independent members of society and consequently the possibility existed that some home-reared retardates would ultimately require a similar type of sheltered environment after the decease of parents or guardians.

Only in the last few years has the widespread incidence of mental retardation been fully recognized and some appreciation been accorded to its tremendous cost, not only in terms of the financial expenditure involved, but in terms of the inestimable waste of human resources. Every twenty-five minutes a retarded child is born in Canada, and the disability represents the fifth largest disabling condition in Canada and the United States, exceeded only by mental illness, cardiac disease, arthritis and cancer. It has been estimated that 2-3% of the population[6]

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[6] S. Kolt, Mental Retardation, a paper prepared in partial fulfillment of the Human Behaviour and Social Environment sequence of the Master's Program, at the School of Social Work, University of Manitoba, pp. 1-26.

of Canada and the United States are affected. Any knowledge which might help this proportion of our population to lead more productive, independent lives would not only result in financial savings, but would also diminish some of the shame and stigmatization which presently surrounds this affliction and isolates the mental retardate from the rest of society.

The focus of this study was, therefore, directed toward measuring the level of social maturity of two selected groups of trainable mentally retarded children in the hope that the data collected would contribute to the limited storehouse of knowledge about optimum conditions of care for this category of the retarded.

The study was conducted by a group of eight[7] students enrolled in the Master of Social Work program at the School of Social Work, University of Manitoba. At the same time, three other student groups were also engaged in similar research projects in related areas of the life experience of the trainable mental retardate. This study was commenced in September 1966 and terminated in April 1967.

In order to undertake this study, the Research Committee of the School of Social Work approached two institutions offering services to the mentally retarded in the Province of Manitoba, namely, the Winnipeg Kinsmen School, a specialized day school, and the Manitoba School, a residential treatment and training institution, to obtain a sample group for study purposes. From the population within the specified

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[7]Although only seven students completed this research project, the bulk of the study was undertaken by eight researchers and for the purposes of this research report accredization will be accorded to eight members.

chronological and intellectual range which was offered by the two institutions, ten boys and ten girls were selected from each setting to comprise the sample grouping which constituted the population of this research study.

The Winnipeg Kinsmen School, with an enrollment of over three hundred students, is operated by the Canadian Association for Retarded Children in the City of Winnipeg and provides service to trainable mentally retarded children between the ages of 4-18 years of age from Metropolitan Winnipeg. Nineteen classes are offered at this school, including two pre-school classes. The program consists of habit, sensory, speech and academic training, arts and crafts to encourage coordination, and extra curricular activities, such as Cubs and Brownies. Older girls are given some instruction in domestic science, while boys are taught rudimentary manual skills. Many children attend school for only one-half day until they reach the mental age of five years, after which they are enrolled in the full day's program. Transportation is provided by a fleet of buses, supplemented by taxis, and older children are encouraged to travel from their homes by public conveyance. Mr. A. Houle, Executive Director of the Canadian Association for Retarded Children - Manitoba Division, in an address to the Master's Program students at the School of Social Work, University of Manitoba, in September 1966, defined the goal of the Winnipeg Kinsmen School as representing "an attempt to equip the trainable mental retardate to live in the community".

The Manitoba School, located in the City of Portage la Prairie, approximately fifty miles west of Metropolitan Winnipeg, is operated by the Province of Manitoba. This institution services all categories of

retardates, six years of age and over, from rural and urban areas of the province, and has a total population of one thousand patients. Nursing care, custodial care, occupational, academic and rehabilitation training are offered to those who are capable or needful of such programs. Recreational programs are also carried out both within and without the institution and periodic field trips are undertaken to the outside community.

The original area of concern, of which this study forms a part, was the broad problem of mental retardation in our society. It was selected by the Research Committee of the School of Social Work as representing a societal problem of particular significance at the present time. Six specific areas in the life of the trainable mental retardate were isolated and presented to the four student research groups involved, who each selected one aspect which seemed to offer potentials for research purposes. Theoretical information about causes, incidence, characteristics, prognosis, planning and research were furnished by the medical, behavioural and social sciences.

After a perusal of the pertinent literature, including the limited number of applicable research studies, it was decided that the home seemed to represent the most suitable environment for optimum social, emotional and mental development of this category of mentally retarded child, and it was hypothesized that this conclusion would be substantiated by the recording of a higher level of social maturity by children who resided in their own home at the time of the study. This supposition was corroborated by studies undertaken by researchers such as Bowlby and Golfarb[8]

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[8]Begab, op. cit., p. 12.

on the effects of institutionalization on "normal" children, although isolated studies of specially equipped institutions did tend to suggest that certain types of institutional care was capable of providing comparably favourable conditions for emotional, social and mental development.[9] Nevertheless, based on the findings of the majority of the available research findings, it was hypothesized that:

> A group of trainable mentally retarded children, residing at home and attending the Winnipeg Kinsmen School, have a higher level of social maturity than a comparable group of children in the Manitoba School.

Group. For the purposes of this research study, "group" signifies twenty children within the chronological age range of 7-12, inclusive, selected from the appropriate populations offered by the two geographical settings being studied.

Comparable. For the purposes of this research project, "comparable" signifies similar in respect to sex distribution, mean chronological age and size of group, and within that range of mental retardation designated as "trainable".

Level of Social Maturity. This is defined in terms of the social quotient score obtained on the Vineland Social Maturity Scale.

Social Quotient. Gives an indication of how well the child is able to use his intelligence in caring for himself and how well he is growing toward (his) ultimate maturity. This index is arrived at by dividing the child's social age (in months) by his chronological age (in months) and multiplying by one hundred.

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[9] H. M. Birch and L. Belmont, "The Problem of Comparing Home Rearing versus Foster Home Rearing in Defective Children", Pediatrics, 1961, Vol. 28, p. 960.

Because many elements of this study could not be scientifically verified, it was therefore necessary to make the following assumptions:

1. The information obtained from the visiting cards and personal dossiers of the children in the Manitoba School and the lists submitted by the Winnipeg Kinsmen School were valid and reliable.

2. The Personal History Schedule and the Vineland Social Maturity Scale were both administered in the same manner by all researchers engaged in the present research study.

3. Although the responses by interviewees in both settings may have been subjective, it was assumed that they were of the same degree of validity and that the interviewees were equally knowledgeable about the child and their responses represented a comparably accurate indication of the child's performance at the time of the study.

The Vineland Social Maturity Scale, which is a "third person" questionnaire, was employed in the collection of data for this study primarily because the mental and physical disabilities which characterized many of these children prevented them from understanding and/or responding to many of the questions. Moreover, an inordinate length of time might have been consumed if a direct questioning or observation approach had been utilized. At the same time, a separate Personal History Schedule, compiled by the research group, was administered. This Schedule was designed to obtain more comprehensive data relative to the child's family and background, as well as pertinent aspects of his daily life, which might have a significant effect upon the level of social maturity, but which had not been incorporated in the Vineland Social Maturity Scale.

A pretest of randomly selected subjects from the sample group was carried out in order to verify the usefulness of the Personal History Schedule as an auxiliary device for the collection of additional information.

The data resulting from the administration of the Vineland Social Maturity Scale and the Personal History Schedule to the respective respondents at each geographical setting, was examined and inter-group and intra-group comparisons and contrasts were made.

As well as the previously mentioned assumptions, certain limitations derived from the size and scope of this research project must be borne in mind when interpreting the accumulated data. Moreover, the inordinately short span of time available for research purposes prevented the inclusion of many dimensions which conceivably might have contributed to the significance of this study.

It was acknowledged that the size of the researched population, twenty subjects from each setting, precluded the formulation of anything but tentative suppositions and conclusions. In addition, the school curriculum offered by the two institutions, their respective goals and the quality of instruction available were not considered by this research study and to the extent that they differed, the validity of these findings may well have been affected.

Because of the relatively small suitable population available for the purposes of this research study, the difficulty in obtaining information, coupled with limitations imposed by the short span of time available, it was not possible to take into consideration such factors as previous life experiences, cultural background, rural/urban influences, causes of mental retardation and the effects of medications, all

of which may have significantly influenced the results which were obtained by this research study.

Moreover, it was conceded that a longitudinal examination of the social maturity indices would have provided a more reliable method of ascertaining the relative merits of home versus institutional care. Therefore, any differential in social maturity indices favoring children resident in the home at the time of the study must be evaluated in the light of the real possibility that parents may tend to institutionalize "problem" children, or those with less innate potential.

It was further acknowledged that any tentative conclusions concerning home care versus institutionalization resulting from this research study must be considered as applicable for generalization only in relation to trainable mentally retarded children in the same age grouping who attend special classes.

It was the sincere hope of the group involved in researching this question that the results which were obtained would contribute in some small way to the fund of knowledge which had already been accumulated about the trainable mentally retarded child. Despite the many limitations which were unavoidably a part of this research study, the achievement of even limited findings may provide the rationale for future more comprehensive and ambitious research projects.

CHAPTER II

REVIEW OF THE LITERATURE

Before comparing the social functioning of trainable mentally retarded children living at home with those living in a residential institution, a brief look at traditional societal attitudes and care of mental deficients should be undertaken, as well as a review of present-day thinking and research studies. Such a review will reveal not only the relative youth of any concerted action in the whole field, but will disclose the diversity of opinion still existing among both professionals and laymen as to the relative merits of two of the most basic units of care in our society, namely the family and the institution.

Although grades of mental deficiency were not recognized until Edward Seguin's work in the 19th century, it was probable that most early literature recorded only societal attitudes toward the severely or moderately retarded group. The simple, routine and repetitive tasks of early agricultural societies tended to absorb the mildly retarded group with relative ease, since no degree of abstract thinking or verbal skills were required. As a result, only the most ineffective or bizarre behaviour was likely to be recognized and such behaviour characteristics would more likely be exhibited by the more severely retarded group.

Historically, the mentally retarded were looked upon with contempt and suspicion and not infrequently were persecuted or exterminated. Some use seems to have been made of this group as objects of amusement in both Roman and medieval periods, but primarily societal attitudes, despite

early Christian teachings, tended to remain cruel and punishing until the thirteenth century when the first custodial care colony was established in Belgium. Thereafter followed many centuries of vascillating custodial care with little attempt being made to study retardation, its causes, treatment or training in any scientific or systematic fashion until the eighteenth and nineteenth centuries when the individual or clinical treatment of mental retardation was commenced and, for the first time, mental deficiency was defined as a condition of arrested development rather than a disease.

Despite this increased knowledge and the trend toward humanistic societal attitudes, Dr. W. E. Fernald mirrored the public image toward this deviant group at the beginning of the twentieth century (1912).

> The social and economic burdens of uncomplicated feeble-mindedness are only too well known. The feeble-minded are a parasitic, predatory class, never capable of self-support or of managing their own affairs. The great majority ultimately become public charges in some form. They cause unutterable sorrow at home and are a menace and danger to the community. Feeble-minded women are almost invariably immoral and if at large usually become carriers of venereal disease or give birth to children who are as defective as themselves. Every feeble-minded person, especially the high-grade imbecile, is a potential criminal, needing only the proper environment and opportunity for the development and expression of his criminal tendencies.[1]

Recommendations of the period included death, restrictive marriage laws, improvement of the environment, life segregation and sterilization, the last two being the most popular and presumably were based on the premise that mental retardation was an irreversible condition which

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[1]Michael J. Begab, The Mentally Retarded Child, A Guide to Services of Social Agencies, U. S. Department of Health, Education, and Welfare, Children's Bureau, 1963, p. 2.

constituted a danger to society. However, retardation was not regarded as a social problem until army tests during World War I revealed the large numbers of sub-normal males and similar tests in World War II gave equally alarming results.

In North America the most effective impetus to formulating comprehensive programming and care for the mentally retarded was provided in October 1961 by the late President Kennedy with the appointment of a Panel on Mental Retardation, composed of experts representing citizen groups and a wide range of professional fields. The Report published by this Panel "A Proposed Program for National Action to Combat Mental Retardation" had three central themes, the first of which was "retarded persons have potentials for productive living beyond those formerly recognized".[2]

Implicit in this statement was the idea that mental retardation was not only a possibly reversible condition, but that mental retardates of all degrees, if given optimum opportunities, were capable of more productive social functioning than had hitherto been achieved. The crux of the problem, therefore, lay in providing the circumstances which would enable the mentally retarded to develop to their fullest potential.

However, even before 1961 it had become more and more apparent as a result of the volumes of research conducted with children of "normal" intellect that:

> Opportunity to enjoy a wide range of physical experiences is essential not only for the obvious beneficial effects in physical growth, but for its effect on learning and its consequent impact on psychological and social development.[3]

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[2] Ibid., p. 4.

[3] Ibid., p. 19.

In the forties Golfarb[4] compared a group of children who had been institutionalized until three years of age and then placed in foster homes, with another group of similarly endowed children who had been placed directly in foster homes. In addition to personality difficulties, children whose earliest years had been spent in institutions had a mean intelligence quotient more than twenty points less than the children who had been placed directly in foster homes. Golfarb concluded that it was not group care as such, but rather the lack of individualization (a difficult thing to achieve in most large institutions) that is so detrimental to the child.

The same volume of researched knowledge, however, was not available about the trainable mental retardate and little research had been undertaken to determine whether or not certain conditions affected his social, emotional and intellectual development.

> Current knowledge regarding trainable persons is largely the result of clinical impressions and direct observation, and is focused primarily on the problems and limitations they present . . . We have yet to isolate most of the many variables that determine why these persons function as they do, and only in very recent years has any real effort been made to explore and develop their potentials.[5]

Because of predominant societal attitudes that mental retardation (particularly moderate and severe retardation) was an irreversible condition and because of the high valuation placed upon intellectual ability in our society and the resultant feelings of shame and inadequacy experienced by parents of moderately retarded children, this group was

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[4] Ibid., p. 12.

[5] Ibid., p. 27.

often placed in institutions as a matter of expediency with little regard as to whether they might profit by such incarceration. Lacking funds and knowledge, institutions tended to be custodial in function, with little regard for the development of the potentialities of their inmates.

Tizard in a summarization of English studies states:

> . . . institutional children are particularly retarded in all aspects of language and speech, and in verbal intelligence as compared with similar mentally handicapped children who live at home. The older the children the greater becomes the discrepancy between their achievements and abilities and those of comparable children brought up in their own homes. The same is true of their personal independence . . . Observation also shows them to be extremely backward socially and emotionally; and it is clear that in these and in other ways institutional care today warps and stunts the development of already seriously handicapped children.[6]

Shotwell and Shipe compared a group of hospitalized mongoloid children, who had been placed in private institutions from birth with a group of hospitalized children whose first $2\frac{1}{2}$ years had been spent at home. Medical records were examined to rule out the possibility of any systematic differences between the two groups, other than differential placement in infancy. The two groups did not appear to differ with respect to physical disability, such as congenital heart disease, and the families differed only in that those of the home-reared children tended to be of somewhat higher socio-economic and educational status. The Vineland Social Maturity Scale was used in testing. It was found that:

> Mongoloid children who spend the first two years of their life in their own home show better intellectual and social development,

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[6] Ibid., p. 111.

> even after a subsequent period of institutionalization, than children institutionalized from the very beginning of life.[7]

In view of the above findings, Shotwell and Shipe concluded:

> It seems reasonable to assume, therefore, that the superiority of the home-reared children in both intellectual and social skills is to be attributed to their home environment.[8]

In 1960 Centerwall and Centerwall conducted a similar study of the physical and mental development of children with mongolism who were placed in foster homes (institutionalization) very soon after birth (Group P - 32 in number) with a similar group who were reared in their own homes until 2½ years of age or older (Group H - also 32 in number). At the time of the study these children were patients of a state hospital for several years and the group were matched as to present age, but were otherwise randomly chosen from the hospital population. At an average age of seven years, children in Group P functioned generally within the severely retarded range, whereas those in Group H were within the moderately retarded or trainable range.[9]

Since intellectual ability represents an important facet of social functioning, it might therefore be assumed that the members of Group H also attained a higher level of social functioning than did the members of Group P.

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[7]Anna M. Shotwell and Dorothy Shipe, "Effect of Out of Home Care on the Intellectual and Social Development of Mongoloid Children", American Journal of Mental Deficiency, Vol. 68, May 1964, p. 696.

[8]Ibid., p. 696.

[9]S. A. Centerwall and W. R. Centerwall, "A Study of Children with Mongolism Reared in the Home Compared to Those Reared away from the Home", Pediatrics, Vol. 25, 1960, p.685.

A study conducted by Cain and Levine of the effects of community and institutionalized school classes for trainable mentally retarded children found that trainable children made greater progress staying at home or attending special day classes than they do in large multi-purpose facilities.[10]

A similar result was obtained by Stedman, Eichorn, Griffin and Good (1962) who compared a group of very young mongoloids placed in an enriched institutional environment, with a matched group of home-reared mongoloids. They also found a significant difference between the hospital-reared group in favour of the home-reared group on both intellectual and social maturity scales.[11]

Dorothy Cobb in her article on preparing the mentally deficient child for community adjustment noted that mental deficients seemed to develop their potentials more in home settings than they do in institutional settings.[12]

In contrast to the above findings, Tizard and Associates, an English group of researchers, studied the effectiveness of a residential nursery in fostering the development of retarded children who for various reasons could not be retained in their own home. It was found that the utilization of a small group pattern with a stable relationship with competent adult attendants and characterized by a nursery school

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[10]L. F. Cain and S. Levine, A Study of the Effects of Community and Institutionalized School Classes for Trainable Mentally Retarded Children, C.E.C. Research Monographs, Series B, Washington, D.C., 1963, p. 39.

[11]Shotwell and Shipe, op. cit., p. 693.

[12]Dorothy Cobb, "Preparing the Mentally Deficient Child for Community Adjustment", American Journal of Mental Deficiency, LVIII, 1954, pp. 664-672.

atmosphere, resulted in significant progress in verbal, behavioural and social development. In evaluating this study, Birch and Belmont suggested that disturbance in development progress was not a function of institutionalization, but rather the consequence of inadequate institutional practices with children. They concluded that:

> Although there can be no argument with the general proposition that close 'good relations' usually represented by maternal care, are of benefit to the normal child, the applicability of this general proposition to the social management of defective children is by no means automatic.[13]

In their criticism of the Centerwall and Centerwall study, these researchers stated that the Centerwalls' assumed group comparability was essentially only a presumption on their part since the number of years which had elapsed before this study was undertaken precluded obtaining any capacity measurements.[14]

Mary T. Hobbs in her study of institutionalized and non-institutionalized mentally retarded children confirmed the Birch and Belmont findings. Although her results did indicate that institutionalized subjects were typically more timid, emotionally flat, unresponsive and showed little interest in the interview, the most likely explanation was that socially inadequate individuals tend to be institutionalized and that institutionalization contributed further to their social inadequacy.[15]

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[13]H. M. Birch and L. Belmont, "The Problem of Comparing Home Rearing versus Foster Home Rearing in Defective Children", Pediatrics, Vol. 28, 1961, pp. 956-960.

[14]Ibid., p. 956.

[15]Marty T. Hobbs, "A Comparison of Institutionalized and Non-Institutionalized Mentally Retarded Children", American Journal of Mental Deficiency, Vol. 68, May 1964, pp. 206-210.

In conclusion, although no research study could be located which unequivocally demonstrated the superiority of home care over institutional care of trainable mentally retarded children (and, in fact some evidence seemed to exist that certain types of institutional care might result in the maximization of the potentials for intellectual and social functioning), the relatively few studies which did compare institutional versus home care of the trainable mental retardate (and none exactly duplicated the present research study) seemed to indicate that home-reared children were able to approximate more closely their optimum development potential, intellectually, socially and emotionally. However, this conclusion does not negate the fact that institutionalization may present the only answer where extensive medical and nursing care are constantly required, or where, for some reason, the presence of a mental retardate threatens the stability of the family.

CHAPTER III

METHOD

This is a diagnostic/descriptive study designed to compare the social maturity levels of two populations of trainable mentally retarded children resident in different settings at the time of the study, in order to pose tentative observations, suppositions and relevant questions of professional and administrative concern. Some use of statistics was made, but the size of the researched population precluded the appelation of a statistical study and this factor, combined with the researchers' inability to control variables which conceivably might have skewed the statistical compilations, prevented the formulation of any causative conclusions and limited the findings of this research study to tentative observations and the formulation of questions which might constitute the basis for future studies in this area.

After the main focus and scope of the study had been selected and a review of the available literature had been completed, significant areas were isolated which led to the formulation of the major hypothesis. Based on the focus of the hypothesis, it was decided to utilize the Vineland Social Maturity Scale to measure the social quotients of both groups of children, supplemented by a Personal History Schedule compiled by the research group. Both instruments were administered to knowledgeable respondents and to parents in the institutional and home settings respectively by means of face-to-face interviews. The data and information thus obtained was compared and contrasted, and from this analysis,

tentative comparisons, observations and significant questions were formulated about the social maturity and other pertinent characteristics of trainable mentally retarded children in institutional and home settings.

After consultation by the Research Committee of the School of Social Work, with Dr. G. Lowther, Medical Director of the Manitoba School, a specialized institution for the care and training of mentally retarded children, and with Mr. D. Dobbin, Executive Secretary of the Association for Retarded Children in Greater Winnipeg, there were made available for the purpose of this study a total population of 31 boys and 10 girls from the Manitoba School and 176 children from the Winnipeg Kinsmen School, all within the designated chronological age (utilizing September 1, 1966 as the cut-off date) and range of mental retardation and free from any severe physical disability. The latter population, however, represented the net total after the elimination of those children whose parents indicated their unwillingness to participate in this research study by their negative response to a letter from the Winnipeg Kinsmen School.

For the purposes of this research project, children between the ages of 7-12, inclusive, were selected to comprise the population of this study for the following reasons:

1. The latency age represents the most productive period for learning social and academic skills and conceivably environment might be a significant factor during this stage of development.

2. For reasons beyond the control of the research group the universe under six and over twelve years was automatically eliminated. As a matter of policy, neither the Manitoba School nor the Winnipeg

Kinsmen School normally accept children under the age of six years. The adolescent population at the Winnipeg Kinsmen School was relatively small and the total universe had already been preempted by another research group at the School of Social Work whose study was focused entirely in this age range. On the other hand, the population in the selected age range was relatively large at both settings and would therefore constitute a larger universe from which to draw our sampling.

3. The selection of children seven years of age and over theoretically permitted a minimum of one year's institutionalization at the Manitoba School and one year's attendance at special day classes at the Winnipeg Kinsmen School - a requirement deemed necessary by the research group based on the aims and purposes of this particular research project. However, due to the limited population available at the Manitoba School in the chronological age specified, it later became necessary to eliminate the one-year institutional requirement, with the result that any conclusions or observations about institutionalization are necessarily subject to this limitation.

It was the general consensus of opinion of the research group involved in this study that a total population of 40 subjects, 20 from each setting, would comprise an adequate sampling to permit a rudimentary examination of the a number of variables. Moreover, selection of a larger population was precluded by the limited time available to the researchers involved in this project and to the limited number of subjects available within the chronological and mental age specified. However, despite the statistically small population which comprised the researched population,

it was felt that their representativeness might very well stimulate interest in mounting future more comprehensive research studies.

Although another research project utilizing the same mental and chronological age population was concurrently being conducted, this research group was accorded the privilege of selecting the first sampling from the Winnipeg Kinsmen School because the success of this study hinged primarily upon the procurement of populations which could be matched as closely as possible.

From the total population provided by the Winnipeg Kinsmen School, a random, age-stratified sampling of children between the ages of 7-12, inclusive, equally distributed as to sex, was selected. In order to complete the researched population of twenty subjects from the Winnipeg Kinsmen School, a further random sampling of eight children, equally distributed as to sex, was taken from the entire population, which together with the previous sampling, comprised the representative population of twenty children reared at home and attending special day classes.

Since only ten girls within the designated chronological age and range of mental retardation was available in the Manitoba School, the research group had no alternative but to accept this entire population. From the total population of 31 boys within the chronological and mental age range, one boy was randomly selected from each chronological age grouping of 7-12, inclusive. In order to complete the total population of ten male subjects from the Manitoba School, four additional boys were randomly selected from groups which had been chronologically matched with the supplementarily selected male subjects from the Winnipeg Kinsmen School.

In order to provide the additional information required for the Personal History Schedule, Dr. Lowther made arrangements for the personal files and visiting cards of the sample group to be made available to the researchers. Files and specific intelligence quotients at the Winnipeg Kinsmen School, however, were not available for reference purposes, the Winnipeg Kinsmen School limiting its resources to the names and addresses of children designated as being within the trainable range of mental retardation.

Because of the intense emotional reaction frequently generated in the family by the presence of a retarded child, the refusal of certain parents to participate in this research project may well have been indication of a home environment in which social development might be somewhat uncertain, and for this reason the researched population from the Winnipeg Kinsmen School may not have been completely representative of the home-reared population. Therefore, results obtained from the utilization of such a sampling were necessarily subject to some questions and uncertainties.

Following the suggestions of the Research Committee of the School of Social Work, the research group unanimously agreed that the Vineland Social Maturity Scale, a copy of which is attached as Appendix A, would represent the most reliable and appropriate instrument with which to measure the social maturity quotients of the children in each of the two settings to be researched. Each specific item of this Scale represents some particular aspect of the ability to look after one's own practical needs and samples such various aspects of social ability as self-sufficiency, occupational activities, communication, self-direction and social participation and reflects progressive freedom from need of

assistance, direction or supervision on the part of others. Moreover, this score is not based on the scoring judgment of the respondent (which might therefore involve a greater degree of subjectivity), but by the researcher who obtains as much detail regarding the behaviour pattern of the child as is deemed necessary in order to score precisely and accurately. Its specific allowance for "no opportunity" made this instrument particularly applicable for institutionalized children who may not have equal "opportunities" when compared with their home-reared counterparts. These factors, coupled with the proven accuracy and reliability of this instrument provided the rationale for the selection of the Vineland Social Maturity Scale as the main instrument for this research study.

In order to obtain additional data (not supplied by the Vineland Social Maturity Scale) relating to the past and present life history of these two sample populations which might conceivably prove useful in compiling inter- or intra-population comparisons between the measured social maturity indices and specifically designated variables in the child's life history, an additional Personal History Schedule was developed by the research group, copy of which is attached as Appendix B. To ensure uniformity of response, questions were worded so as to elicit factual, specific responses and no open-end questions were utilized. Questions included in this Schedule related to the child's parents, family constellation, length of institutionalization, frequency of visits or vacations and special abilities or interests, as it was hypothesized that these selected factors might very well have a significant bearing upon the child's present level of social maturity.

In order to ensure uniformity in the use of the Vineland Social Maturity Scale, Miss Lois Fry, Clinical Psychologist on staff of The Society for Crippled Children and Adults, conducted a briefing session on the administration and scoring of this instrument. The research group met to discuss any questions or problems which could be foreseen before pretesting and a subsequent meeting was held to review any problems which had been encountered. Selected excerpts from the "Vineland Social Maturity Scale Manual of Instructions" were utilized by all interviewers in administering this instrument in order to ensure that all questions were uniformly interpreted when the Scale was administered to respondents. Any ambiguous response was elaborated fully on the Scale and the scoring was discussed later at a formal meeting of the research group. All students in the research group were given the opportunity of administering both instruments to respondents from both settings. Full responsibility was accorded Dr. Lowther of the Manitoba School in the selection of respondents who would be most knowledgeable about the subjects being researched.

The pretest utilizing a randomly selected group of eight children, half from each setting, was carried out in December 1966, primarily to determine the applicability of the Personal History Schedule to the objectives of the research study and to familiarize researchers with the use of the Vineland Social Maturity Scale. After an analysis of the resulting data had been made, it was decided that no revision of the Personal History Schedule was necessary. Moreover, as all researchers felt confident of the reliability of the results obtained from the administration of the Vineland Social Maturity Scale during this pretest, the results were, therefore, incorporated as part of the complete study.

Interviews for the purpose of administering the two schedules were carried out during the month of January 1967 by the Masters' students participating in this particular research project and consisted of four face-to-face interviews by each student with parent or knowledgeable institutional attendant, depending upon the setting in which the interviews were being conducted. Interviewers were provided with Letters of Introduction from the School of Social Work for identification purposes. The aforementioned four interviews, coupled with the pre-test interview carried out in December 1966, comprised the total of five interviews which were undertaken by each of the eight researchers involved in this project.

It was revealed during the administration of these instruments that one of the twelve year old girls in the population from the Winnipeg Kinsmen School had actually been thirteen years of age at the September 1, 1966 cut-off deadline. Moreover, due to an ambiguity of given names, one of the girls in this population actually turned out to be a boy. As a result, chronologically and according to sex the two populations from each setting were not identically matched. However, a compilation of the mean chronological ages for both sexes from each setting revealed that the above factors did not materially change the previous mean chronological scores and both subjects were therefore included as part of the total population.

The plan of analysis centred on comparing the mean social quotient scores, as measured by the Vineland Social Maturity Scale, with a number of other variables. Both inter-group and intra-group analyses were undertaken in order to make some tentative comparisons and to enable the

formulation of relevant suppositions or questions about possible significant factors in the past or present life situation of the trainable mentally retarded child in these two settings.

Inter-group comparisons were made between the mean social maturity indices, as measured by the Vineland Social Maturity Scale, according to place, sex and age, as well as according to mean unit item scores (as shown on the Vineland Social Maturity Scale).

Further observations and suppositions were derived from an intra-group analysis of certain information obtained from the Personal History Schedule, which included an examination of the child's ordinal position in the family constellation (Winnipeg Kinsmen School only). A comparison was also made of the length of institutionalization with social quotient scores of the children at the Manitoba School. The remaining data on the Personal History Schedule did not lend itself to analysis and therefore was disregarded.

Comparisons and contrasts were depicted in tabular form. Certain observations and findings were also formulated concerning the findings revealed by both instruments. These analyses, findings and observations will be elaborated in detail in Chapter IV of this research study.

CHAPTER IV

ANALYSIS OF DATA

The findings portrayed in this chapter represented the most significant aspects which were revealed after an examination of the raw scores obtained from the administration of the Vineland Social Maturity Scale and the Personal History Schedule to knowledgeable personnel at the Manitoba School and to parents of children attending the Winnipeg Kinsmen School.

A comparison of the mean social quotient scores of the researched populations at both geographical settings by sex is shown in Table 1.

TABLE 1

MEAN SOCIAL QUOTIENTS OF WINNIPEG KINSMEN SCHOOL AND MANITOBA SCHOOL POPULATIONS BY SEX

Place	Mean Social Quotients Boys	Mean Social Quotients Girls	Mean Social Quotients Total
Winnipeg Kinsmen School	54.2	49.7	52.1
Manitoba School	38.3	40.1	39.2
Mean Social Quotient Total	49.0	42.4	45.7

It was found that the mean social quotient score of the children at the Winnipeg Kinsmen School was 52.1 or 12.9 points (28%) higher than the 39.2 score which was recorded by the children at the Manitoba School. These figures substantiated the main hypothesis of this research project which stated that a group of trainable mentally retarded children residing at home and attending a special day school would have

a higher level of social maturity than a comparable group in an institutional setting and also attending classes.

In addition, the mean social quotient score of 54.2 achieved by the boys at the Winnipeg Kinsmen School was 15.9 points or 42% higher than the mean social quotient score of 38.3 which was recorded by the boys at the Manitoba School, whereas the mean social quotient score of the girls at the Winnipeg Kinsmen School was 49.7 or 9.6 points (24%) higher than the mean social quotient score of 40.1 achieved by the girls at the Manitoba School.

An intra-group analysis revealed that the boys at the Winnipeg Kinsmen School achieved a mean score of 54.2 or 4.5 points (9%) higher than the mean social quotient score of 49.7 achieved by the girls at the same geographical location, whereas the boys at the Manitoba School recorded a mean social quotient score of 38.3 or 1.8 points (4%) lower than the mean social quotient score achieved by the girls at this location.

These findings raised questions concerning possible explanations of the masculine attainment of both the highest and the lowest scores which were recorded. Are boys more adversely affected by institutionalization, or are there personality and innate ability differences which may account for this differential score? On the other hand, why do boys seem to benefit more materially from the home environment than do girls?

In Table 2 is shown the mean social quotient scores of the total researched population at both geographical settings by sex and chronological age.

TABLE 2

MEAN SOCIAL QUOTIENTS OF WINNIPEG KINSMEN SCHOOL AND MANITOBA SCHOOL POPULATIONS BY SEX AND CHRONOLOGICAL AGE

Chronological Age*	Sex	MEAN SOCIAL QUOTIENTS		
		Winnipeg Kinsmen School	Manitoba School	Total Both Locations
7	Boy	69.1	56.0	62.6
	Girl	51.6	-	51.6
	Total	63.3	56.0	61.5
8	Boy	-	40.5	40.5
	Girl	54.9	-	54.9
	Total	54.9	40.5	50.1
9	Boy	76.6	47.1	66.8
	Girl	41.6	44.5	43.5
	Total	59.1	45.0	51.3
10	Boy	62.7	43.0	52.9
	Girl	62.7	38.3	50.5
	Total	62.7	39.5	47.2
11	Boy	39.0	25.0	31.9
	Girl	49.0	36.9	40.9
	Total	42.3	30.9	35.8
12	Boy	40.7	36.7	38.7
	Girl	56.1	34.2	39.0
	Total	43.8	36.2	40.0
13	Boy	-	-	-
	Girl	35.2	-	35.2
	Total	35.2	-	35.2
ALL AGES	Boy	54.2	38.3	49.0
	Girl	49.7	40.1	42.4
	Total	52.1	39.2	45.7

* Frequency Distribution scores for each age grouping shown as Appendix C-I

It was noted that in each of the foregoing age classifications, the children at the Winnipeg Kinsmen School recorded total mean social quotient scores (as shown hereunder), which were consistently higher than those recorded by the children at the Manitoba School.

Age	Mean Social Quotient Scores	
	Winnipeg Kinsmen School	Manitoba School
7	63.3	56.0
8	54.9	40.5
9	59.1	45.0
10	62.7	39.5
11	42.3	30.9
12	43.8	36.2
13	35.2	-

Therefore, Table 2 further substantiated the postulated superiority of children residing at home and attending special day classes.

In addition, the total mean social quotient scores generally showed a regressive tendency from a mean total score of 61.5 at the age of seven years, to a mean total score of 35.2 at the age of thirteen years, which raised speculations about the declining capacities of the trainable mentally retarded child to meet the increasing demands expected of his chronological age grouping.

Tables 3 and 4 show the mean positive unit achievements (in each sub-class of the Vineland Social Maturity Scale) of the two researched populations by sex.

TABLE 3

ACTUAL MEAN POSITIVE ACHIEVEMENT IN UNITS OF POSSIBLE TOTALS OF TWENTY CHILDREN AT THE WINNIPEG KINSMEN SCHOOL IN SUB-CLASSES OF THE VINELAND SOCIAL MATURITY SCALE

Sub-Classes of V.S.M.S.*	Total Possible Achievement	Actual Achievements			
		Boys	Girls	Total	Percent
Self-Help General	14	11.8	11.1	11.5	82
Self-Help Eating	12	9.4	9.5	9.5	79
Self-Help Direction	13	8.8	8.2	8.5	65
Locomotion	10	6.1	5.2	5.7	57
Occupation	22	9.1	8.1	8.7	40
Communication	15	6.4	5.7	5.8	30
Self-Direction	14	.4	.2	.3	2
Socialization	17	5.7	5.1	5.5	32

* Vineland Social Maturity Scale

TABLE 4

ACTUAL MEAN POSITIVE ACHIEVEMENT IN UNITS OF POSSIBLE TOTALS OF TWENTY CHILDREN AT THE MANITOBA SCHOOL IN SUB-CLASSES OF THE VINELAND SOCIAL MATURITY SCALE

Sub-Classes of V.S.M.S.*	Total Possible Achievement	Actual Achievements			
		Boys	Girls	Total	Percent
Self-Help General	14	11.6	11.8	11.7	84
Self-Help Eating	12	9.5	9.9	9.7	81
Self-Help Direction	13	7.0	7.6	7.3	56
Locomotion	10	4.7	5.4	5.0	50
Occupation	22	5.0	7.3	6.6	30
Communication	15	4.7	4.8	4.7	31
Self-Direction	14	-	.4	.2	1
Socialization	17	3.9	4.2	4.0	23

* Vineland Social Maturity Scale

Children from the Winnipeg Kinsmen School achieved a higher total mean unit score in all sub-classes except "Self-Help General" and "Self-Help Eating", wherein slightly higher scores were recorded by the Manitoba School population. Despite the relatively small achievement difference between the two populations, questions might be formulated about factors in the institutional environment which enabled this population of trainable mentally retarded children to record a higher score on these particular sub-classes.

The most striking difference between total mean positive unit scores of the two populations was noted in the sub-class entitled "occupation", wherein children at the Winnipeg Kinsmen School scored 2.1 points (or 32%) higher than the children at the Manitoba School, which precipitated speculation concerning the possible limited opportunity and encouragement received by institutionalized children in this area.

It was also noted that both populations recorded their lowest scores in the sub-class entitled "self-direction", e.g., the Winnipeg Kinsmen School scored only 2% of the maximum total in this sub-class, whereas the Manitoba School recorded a comparable score of 1% of the maximum score. The similarity in the recorded achievements of the populations in both settings would seem to indicate that self-direction is not a notable characteristic of the trainable mentally retarded child.

Table 5 shows the mean social quotients of the children at the Manitoba School classified by intervally scaled frequency distribution of length of institutional residency (by months).

TABLE 5

MEAN SOCIAL QUOTIENTS OF TWENTY CHILDREN AT THE MANITOBA SCHOOL BY LENGTH OF INSTITUTIONALIZATION

Length of institutionalization (in months)*	Total Mean Social Quotient	Frequency Distribution (Nos)	Percent
0 - 12	43.6	4	20
13 - 24	25.4	1	5
25 - 36	23.2	2	10
37 - 48	36.5	4	20
49 - 60	36.0	4	20
61 - 72	-	-	-
73 - 84	43.2	3	15
85 - 96	-	-	-
97 - 108	53.3	1	5
109 - 120	63.4	1	5
TOTAL	39.2	20	100

* Raw scores shown as Appendix C-II

After an examination of this table an interesting trend in the mean social quotient scores of the children in this setting was noted. From an initial mean social quotient score of 43.6 at the end of the first year, the scores declined until the termination of the third year, after which they rose slowly until a high of 63.4 was reached at the maximum period of institutionalization. Despite the apparent significance of this trend, the relatively small population (25%) which had been institutionalized more than sixty months (five years and over), must be considered when interpreting this data.

Table 6 depicts selected ordinal family position categories of the children at the Winnipeg Kinsmen School classified by intervally scaled distribution of social quotient scores.

TABLE 6

SOCIAL QUOTIENTS BY SELECTED ORDINAL FAMILY POSITION CATEGORIES OF THE POPULATION AT THE WINNIPEG KINSMEN SCHOOL

Social Quotient Scores*	ORDINAL FAMILY POSITION				Total (Nos)	Total (Percent)
	Only Child (Nos)	Youngest Child (Nos)	Oldest Child (Nos)	Other Child (Nos)		
24 - 33	-	1	-	2	3	15
34 - 43	1	1	-	-	2	10
44 - 53	-	5	-	-	5	25
54 - 63	-	5	2	-	7	35
64 - 73	-	1	-	-	1	5
74 - 83	-	1	1	-	2	10
TOTAL (Nos)	1	14	3	2	20	
TOTAL (Percent)	5	70	15	10	100	100

* Raw scores shown as Appendix C-III

It was found that fourteen children, or 70% of the total population at the Winnipeg Kinsmen School, were the youngest member of the family, which gave rise to some speculations about the ordinal family position of children at the Manitoba School. However, no comparable information was available at the latter setting. On the other hand it was questioned whether this fact might also indicate that after the birth of a retarded child parents felt compelled to voluntarily limit the size of their family.

An examination of the frequency of non-institutional contacts of the children at the Manitoba School with their social maturity indices failed to reveal any consistent or significant findings, and in many instances this data was incomplete. For this reason, no further analysis

of these aspects was undertaken. Moreover, the comparable information on the frequency of vacation trips by children attending the Winnipeg Kinsmen School did not lend itself to analysis.

Chapter IV has presented a brief examination of material collected through the administration of the Vineland Social Maturity Scale and the Personal History Schedule to knowledgeable respondents at the Manitoba School and parents of the children attending the Winnipeg Kinsmen School. From this analysis certain speculations, observations and questions will be formulated in Chapter V.

CHAPTER V

CONCLUSIONS

This research project undertook to compare and to analyze the social maturity indices and selected personal history aspects of two sample populations of trainable mentally retarded children; one population in a residential institution and attending classes and a comparable group living at home and attending special day classes. It was hoped that an examination of the statistical data derived from this research study would reveal some significant trends, correlations or differentials from which tentative observations, suppositions or questions might be formulated. Although the size and scope of this research project precluded the formulation of any conclusions or causation commentaries, it was felt that many of the questions evoked or the observations noted might provide the basis for more comprehensive future research undertakings.

A sample of forty trainable mentally retarded children (twenty from each setting) between the ages of 7-12, inclusive, equally distributed as to sex, was selected by the research group from the total populations which were offered by the Manitoba School and the Winnipeg Kinsmen School for the purposes of this research study. The Vineland Social Maturity Scale and a specially compiled Personal History Schedule were administered to knowledgeable staff at the Manitoba School and to parents of the children attending the Winnipeg Kinsmen School. The data compiled from the administration of these schedules comprise the

statistics recorded in Chapter IV of this study and represent the basis upon which the undernoted tentative observations, suppositions and questions are made. Specifically, findings shown in Chapter IV will be examined and analyzed with reference to the main hypothesis and the limitations and wider implications of the entire research project will be studied.

After a comprehensive examination of relevant research studies and other background material had been completed (See Chapter II), the undernoted hypothesis was formulated:

> A group of trainable mentally retarded children, residing at home and attending the Winnipeg Kinsmen School, have a higher level of social maturity than a comparable group of children at the Manitoba School.

This hypothesis was supported by the social maturity indices which were obtained by this research study. An analysis of this data revealed that the children at the Winnipeg Kinsmen School achieved a 28% higher social maturity index than did the children at the Manitoba School. However, because of the limitations inherent in a research project of this size and scope, no causal relationship between the recorded social maturity index and the geographical setting could be formulated. This research project limited its goal primarily to the verification of a difference in social maturity level in the two geographical locations and to the identification of any other relevant factors which may have been perceived. Any research study which aimed at the isolation of a causal relationship between institutionalization and social maturity level would not only require the elimination of many of the variables, which was not feasible in a study of this

size and scope, but would necessitate a longitudinal examination of the relative increase or decrease of the social maturity indices.

Moreover, it is readily conceded that this differential may have been attributable to a possible tendency on the part of parents to institutionalize children with lower social and mental ability or those who disrupt family life with behaviour problems, such as stubborness, disobedience, aggression or temper tantrums. Some provision for identifying the reasons for institutionalization might have added an interesting dimension to this research project. A similar research study by G. Saenger of factors influencing the institutionalization of mentally retarded individuals in New York City revealed that 91% of the retarded had been institutionalized for behavioural problems in the home.[1]

Although this research study must necessarily circumscribe and qualify any tentative delineation of a causal relationship, yet the identification of certain pertinent factors which seem to have a bearing upon the achievement of a higher level of social maturity would seem to have value not only as the basis for future research projects, but as factors which may have some relevancy for future planning.

Under these circumstances, it seems reasonable to speculate that the higher social maturity index recorded by children at the Winnipeg Kinsmen School may have been attributable, in part, to the home environment and the extra attention and affection which may have been provided. However, as previously indicated, this observation must be qualified by the real possibility that children with higher social and intellectual

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[1]Michael J. Begab, The Mentally Retarded Child, A Guide to Services of Social Agencies, U. S. Department of Health, Education and Welfare, Children's Bureau, 1963, p. 56.

capabilities and who manifest fewer behavioural problems are more likely to be retained in the home than the more severely handicapped or "acting out" children. Moreover, it is conceivable that in many instances better endowed and better behaved children would receive more parental attention and affection than might have been given to children with less endearing qualities.

Since 70% of the children at the Winnipeg Kinsmen School were the youngest member of their family constellation, the extra attention afforded by parents and siblings might also represent a relevant factor in the attainment of a higher level of social maturity by these children. This does not intimate, however, that children in the Manitoba School do not receive the devoted attention of supervisors and staff, but rather that the limitations of an institutional setting in which the staff/patient ratio approximates 30-1, precludes the individual attention, affection and warmth which may be differentially required by these children. Indeed, the experience and knowledge of qualified and capable institutional personnel may very well constitute a positive influence toward the attainment of social maturity, as compared with the oversolicitiousness and overprotectiveness which frequently characterizes home care of the mentally retarded child and which may handicap his progress toward independent functioning.

While boys at the Winnipeg Kinsmen School achieved a higher social maturity index than did their female counterparts at the same geographical setting, this superiority was reversed at the Manitoba School where the female population evinced a higher level of social maturity. Such results would seem to postulate questions about the differential effects of

institutionalization upon the sexes. It would seem reasonable to hypothesize that the more passive, adaptable type of personality (characteristics generally attributed to girls), would experience less difficulty conforming to the relatively regimented and confining environment of institutions, whereas such an atmosphere conceivably might have a more inhibiting or retarding effect upon the more aggressive, individualistic male personality (a characteristic culturally favored in the masculine sex).

Moreover, if parents generally institutionalize those retardates who are disrupting the home environment because of their behaviour problems, it is conceivable that such children would experience more difficulty adapting to institutionalization than the more passive, receptive type of personality. In addition, if it can be hypothesized that the total sex distribution of the trainable mentally retarded is approximately equal, the ratio of the sexes at the Manitoba School, as evidenced by the 31 males and 10 females who comprised the total populations offered by the Manitoba School for research purposes, would seem to suggest that girls are institutionalized less frequently than boys. It is postulated, therefore, that personality characteristics rather than innate abilities and capacities may account for the differential placement of the sexes.

Insofar as the differential in the social maturity index achieved by the male and female populations at the Winnipeg Kinsmen School is concerned, unequal parental and cultural expectations of masculine social independence may have exerted some influence upon the children's behaviour and level of social maturity. How influential are the expectations

by meaningful adults upon the mental retardates' progression toward independent functioning? This question would provide an interesting research project which conceivably might somewhat modify the traditional underestimations of the capabilities and potentialities of the trainable mentally retarded.

> Current knowledge regarding trainable persons is largely the result of clinical impressions and direct observations, and is focused primarily on the problems and limitations they present. We have yet to isolate most of the variables that determine why these persons function as they do, and only in very recent years has any real effort been made to explore and develop their potentials.[2]

Further verification of the validity of the postulated hypothesis was evidenced after an analysis of the mean social quotients of both populations by chronological age. In each age category the children at the Winnipeg Kinsmen School consistently recorded a higher social maturity index than did children in the comparable age category at the Manitoba School.

A chronological breakdown of the populations at both geographical locations revealed that the mean total social maturity indices generally showed a regressive tendency, until a minimal social maturity level was recorded at thirteen years of age. While deviations from this trend were noticeable at the nine and twelve year old levels, in view of the size of the researched population it was difficult to evaluate the significance of the distortion which these two age groupings produced upon the apparent regressive trend.

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[2] Ibid., p. 27.

This apparent pattern of declining abilities is corroborated by Michael J. Begab in his book The Mentally Retarded Child. Describing mongoloid children, he says:

> Growth is irregular; prior to school age, many mongoloid children function at a level of mild retardation. They seem to reach a plateau in early school age, however, and the rate of mental growth then declines to a point of performance usually in the range of moderate and sometimes severe retardation.[3]

Children at the Winnipeg Kinsmen School achieved a higher total mean unit score in all sub-classes of the Vineland Social Maturity Scale than did the children at the Manitoba School, with the exception of "Self-Help Eating" and "Self-Help General". Although the differential between the two populations was not particularly large, its presence conceivably might be explained by the nature of the environment within which the children were being raised. Trainable mentally retarded children are often handicapped by coordination difficulties with consequent awkwardness in manipulating eating utensils, coping with buttons, shoe laces, etc. The understandable concern and over-solicitiousness (and perhaps impatience) of parents under such circumstances may very well obstruct or prevent a child from learning to solve these problems himself. On the other hand, institutional supervisors and staff, with less available time and more experience and knowledge of the problems of the mentally retarded child, are in a position to offer interventive assistance only when their help seems absolutely necessary.

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[3] Ibid., p. 15.

The largest differential in total mean unit scores was recorded in the sub-class "Occupation" wherein children at the Winnipeg Kinsmen School scored 32% higher than the children at the Manitoba School. This sub-class primarily encompasses activities with which the home-reared child might be more familiar, either through parental encouragement and interest, or through observation and imitation of sibling participation in such activities. Although the Vineland Social Maturity Scale does provide allowance for "no opportunity" scoring, the formulation of questions which require even the most objective respondents to make a hypothetical judgment seems to incorporate an additional limitation into certain elements of this Scale.

It was noted that both populations recorded their lowest mean unit scores in the sub-class "Self-Direction". French and Scott[4] have indicated that self-direction measures independence and a sense of responsibility, a characteristic weakness of the mentally retarded. Moreover, it is noticeable that the Vineland Social Maturity Scale does not introduce this sub-class until almost the sixth chronological year, followed by a second question in this sub-class three years later, i.e., nine years of age. It would seem evident, therefore, that the capacity for self-direction does not normally develop until the latency developmental stage, and it is not surprising that this population of trainable mentally retarded (whose abilities roughly approximate one-half that of "normal" children) should display little capacity in this area.

An analysis of the relationship between total mean social quotient indices and the length of institutionalization revealed a rather

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[4] E. L. French and J. C. Scott, "Child in the Shadows, J. B. Lippencott, New York, Philadelphia, 1960, p. 81.

interesting trend. From an initial mean social quotient score of 43.6 at the end of the first year of institutionalization, the social quotient scores declined until the end of the third year, after which they rose slowly until a high of 63.4 was achieved at the maximum period of institutionalization.

However, the validity of this apparent trend, the duration of regression and the subsequent gradual increase in the total mean social maturity indices must be evaluated in the light of the researched population whose limited numbers might conceivably skew or distort any emerging or apparent trend. Assuming, however, that a frequency distribution of one or two subjects does in fact constitute a representative sampling for each year of institutionalization, some interesting speculations may be postulated concerning the seemingly inordinate regression period following institutionalization. Is this peculiar to moderately retarded children, or are there aspects of institutional life which retard or inhibit their adaptation?

An intra-group examination of the child's ordinal position in the family constellation revealed that 70% of the children at the Winnipeg Kinsmen School were the youngest member of the family. This finding gives rise to some interesting speculations about the ordinal position of children at the Manitoba School for whom no comparable information was available. Do parents tend to institutionalize older children? If so, is this done because of concern about possible effects upon younger children, or because of the care and attention these children require at a time when parental energies and time must also be devoted to the remainder of the family?

Fear of bearing more retarded children may well influence parental decisions to limit the size of their families. This observation has been corroborated by K. S. Holt who found that only 25% of the parents of retarded children indicate any desire to increase their family's size.[5]

A further interesting dimension might have been incorporated into this research project through the inclusion of data pertaining to the mother's age at the time of her retarded child's birth. Some evidence seems to exist that a relationship exists between the declining reproductive system of the older woman (35-40 years of age) and the incidence of mongoloidism.

The presence in the family of a trainable mentally retarded child has a tremendous impact upon family life, both physically and emotionally. Feelings of guilt, shame and fear are often reinforced by community attitudes, thereby creating even more maladjustment and withdrawal. Fears about delinquency, about sexual problems and about the child's future after parental death are always present. However, until more scientific knowledge is available about the capacities and limitations of the trainable mentally retarded child, and the influence which environmental conditions exert upon his ability to progress toward his optimum level of independent functioning, parents will be handicapped in their ability to intelligently plan for their retarded child's future, based on a realistic appraisal of the child,

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[5]K. S. Holt, "The Influence of a Retarded Child upon Family Limitations", Journal of Mental Deficiency Research, Vol. 2, 1958, pp. 28-24.

the home situation and the opportunities which are available for his care and training in the community.

Although the results of this research project seem to corroborate the findings of similar studies in the same area of concern, the inability to control numerous variables, which conceivably might have modified or altered the findings of this study, coupled with the limitations imposed by its scope and size and the short time available for research purposes, enables only the formulation of a tentative observation that home care seems to provide the most suitable environment for the maximum social maturity progression of the trainable mentally retarded child. Nevertheless, institutionalization will always be required for some of the mentally retarded who are completely dependent upon others for their physical and emotional needs. More research is needed on the type of facilities and quality of conditions which will provide these retardates with optimum opportunities to realize the psychological potential of which they are capable.

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Vineland Social Maturity Scale

NAME..... Last First Sex..... Grade..... Date..... Year Month Day

Residence..... School..... Born..... Year Month Day

M.A..... I.Q..... Test Used..... When..... Age..... Years Months Days

Occupation..... Class..... Years Exp..... Schooling.....

Father's Occupation..... Class..... Years Exp..... Schooling.....

Mother's Occupation..... Class..... Years Exp..... Schooling.....

Informant..... Relationship..... Recorder.....

Informant's est..... Basal Score*.....

Handicaps..... Additional pts.....

REMARKS:

Total score.....

Age equivalent.....

Social quotient.....

Age Periods
O - I

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

† Key to categorical arrangement of items:
S H G — Self-help general
S H D — Self-help dressing
S H E — Self-help eating
C — Communication
S D — Self-direction
S — Socialization
L — Locomotion
O — Occupation

* For method of scoring see "The Measurement of Social Competence."

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I - II

L	18.	Walks about room unattended	1.0
O	19.	Marks with pencil or crayon	1.1
SHE	20.	Masticates food	1.1
SHD	21.	Pulls off socks	1.1
O	22.	Transfers objects	1.2
SHG	23.	Overcomes simple obstacles	1.3
O	24.	Fetches or carries familiar objects	1.3
SHE	25.	Drinks from cup or glass unassisted	1.4
SHG	26.	Gives up baby carriage	1.4
S	27.	Plays with other children	1.5
SHE	28.	Eats with spoon	1.5
L	29.	Goes about house or yard	1.6
SHE	30.	Discriminates edible substances	1.6
C	31.	Uses names of familiar objects	1.7
L	32.	Walks upstairs unassisted	1.7
SHE	33.	Unwraps candy	1.8
C	34.	Talks in short sentences	1.9

II - III

SHG	35.	Asks to go to toilet	1.9
O	36.	Initiates own play activities	2.0
SHD	37.	Removes coat or dress	2.0
SHE	38.	Eats with fork	2.3
SHE	39.	Gets drink unassisted	2.4
SHD	40.	Dries own hands	2.6
SHG	41.	Avoids simple hazards	2.8
SHD	42.	Puts on coat or dress unassisted	2.8
O	43.	Cuts with scissors	2.8
C	44.	Relates experiences	3.1

III - IV

L	45.	Walks downstairs one step per tread	3.2
S	46.	Plays cooperatively at kindergarten level	3.2
SHD	47.	Buttons coat or dress	3.3
O	48.	Helps at little household tasks	3.5
S	49.	"Performs" for others	3.7
SHD	50.	Washes hands unaided	3.8

IV - V

SHG	51.	Cares for self at toilet	3.8
SHD	52.	Washes face unassisted	4.6
L	53.	Goes about neighborhood unattended	4.7
SHD	54.	Dresses self except tying	4.8
O	55.	Uses pencil or crayon for drawing	5.1
S	56.	Plays competitive exercise games	5.1

V - VI

O	57. Uses skates, sled, wagon	5.1
C	58. Prints simple words	5.2
S	59. Plays simple table games	5.6
SD	60. Is trusted with money	5.8
L	61. Goes to school unattended	5.8

VI - VII

SHE	62. Uses table knife for spreading	6.0
C	63. Uses pencil for writing	6.1
SHD	64. Bathes self assisted	6.2
SHD	65. Goes to bed unassisted	6.7

VII - VIII

SHG	66. Tells time to quarter hour	7.2
SHE	67. Uses table knife for cutting	8.0
S	68. Disavows literal Santa Claus	8.2
S	69. Participates in pre-adolescent play	8.2
SHD	70. Combs or brushes hair	8.4

VIII - IX

O	71. Uses tools or utensils	8.5
O	72. Does routine household tasks	8.5
C	73. Reads on own initiative	8.5
SHD	74. Bathes self unaided	8.8

IX - X

SHE	75. Cares for self at table	9.0
SD	76. Makes minor purchases	9.3
L	77. Goes about home town freely	9.4

X - XI

C	78. Writes occasional short letters	9.6
C	79. Makes telephone calls	10.3
O	80. Does small remunerative work	10.9
C	81. Answers ads; purchases by mail	11.2

XI - XII

O	82. Does simple creative work	11.2
SD	83. Is left to care for self or others	11.4
C	84. Enjoys books, newspapers, magazines	11.5

XII - XV

S	85. Plays difficult games	12.3
SHD	86. Exercises complete care of dress	12.3
SD	87. Buys own clothing accessories	13.0
S	88. Engages in adolescent group activities	14.1
O	89. Performs responsible routine chores	14.6

XV - XVIII

C	90. Communicates by letter	14.95
C	91. Follows current events	15.35
L	92. Goes to nearby places alone	15.85
SD	93. Goes out unsupervised daytime	16.13
SD	94. Has own spending money	16.53
SD	95. Buys all own clothing	17.37

XVIII - XX

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

XX - XXV

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

XXV+

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

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APPENDIX B

THE UNIVERSITY OF MANITOBA
School of Social Work

I. The informant:

Name: _____

Relationship to child: _____

Length of acquaintance: _____

Date of Interview: _____

II. The Family: (Identifying data)

a) Parents:

Father: living _____ deceased _____

At home: _____ regularly

_____ rarely

_____ never

Mother: living _____ deceased _____

At home: _____ regularly

_____ rarely

_____ never

b) Siblings:

No. of brothers _____ Ages _____

No. of sisters _____ Ages _____

No. residing at home _____

at the institution _____

_____

.....cont'd

SCHEDULE - GROUP B

III. The Child: (identifying data):

A. Name _____

B. Sex:

boy _____ girl _____

C. Date of Birth:

day _____ month _____ year _____

D. Physical status: (specify any physical disability)

_____

E. Mental status:

test(s) used _____ date _____ score _____

_____ date _____ score _____

(social data):

A. Present place of residence:

own (or private) family _____

institution (MTS) _____

B. Previous residence history:

- with own family since birth _____

- with own from _____ to _____

from _____ to _____

- in foster family care:
(including care by relatives)

from _____ to _____

- in institutional care:
(specify institutions)

_____ from _____ to _____

_____ from _____ to _____

... cont'd

(social data) - cont'd

C. Social Residential Specifics.

1. During Institutional Placement

a) Vacation Absences:

	family	camp	other (specify)
place:			
frequency:			
duration:			

b) Visits to child:

Person who visits	parents	siblings	other (specify)
frequency:			
duration:			

2. During Home Residence

a) occasional absences from home: with whom?

	family	camp	other (specify)
frequency:			
duration:			

D. Special Abilities, qualities, interests of the child: (describe or specify):

_____

_____

_____

_____

APPENDIX C-I

FREQUENCY DISTRIBUTION OF WINNIPEG KINSMEN SCHOOL AND MANITOBA SCHOOL POPULATIONS BY SEX AND CHRONOLOGICAL AGE

Chronological Age	Winnipeg Kinsmen School			Manitoba School			Total		Total	Per-Cent
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls		
7	2	1	3	1	-	1	3	1	4	10
8	-	2	2	1	-	1	1	2	3	7½
9	2	2	4	1	4	5	3	6	9	22½
10	1	1	2	1	3	4	2	4	6	15
11	2	1	3	2	2	4	4	3	7	17½
12	4	1	5	4	1	5	8	2	10	15
13	-	1	1	-	-	-	-	1	1	2½
TOTAL	11	9	20	10	10	20	21	19	40	100
MEAN AGE IN YEARS	10.2	9.7	10	10.4	10	10.2	10.3	9.8	10.1	

APPENDIX C-II

GRADUATED LENGTH OF INSTITUTIONALIZATION OF TWENTY CHILDREN AT THE MANITOBA SCHOOL BY SOCIAL QUOTIENT SCORES

Institutionalization (in months)	Social Quotients	Mean Social Quotient	Institutionalization (in months)	Social Quotients	Mean Social Quotient
3	31.2)		52	48.0)	
4	32.0)		54	24.5)	
5	56.0)		59	28.3)	
11	55.0)	43.6	60	43.0)	36.0
23	25.4	25.4	79	54.1)	
			82	42.2)	
31	34.2)		83	33.2)	43.2
31	12.2)	23.2			
			102	53.3	53.3
37	18.6)				
43	41.6)		119	63.4	63.4
43	40.5)				
46	47.1)	36.5			

APPENDIX C-III

GRADUATED SOCIAL QUOTIENTS OF TWENTY CHILDREN AT THE WINNIPEG KINSMEN SCHOOL BY ORDINAL FAMILY POSITION

Social Quotient	Ordinal Family Position	Social Quotient	Ordinal Family Position
82.9	Youngest	52.3	Youngest
82.7	Oldest of Three	51.9	Youngest
70.4	Youngest	51.6	Youngest
62.7	Youngest	49.0	Youngest
62.7	Oldest of Five	48.6	Youngest
57.4	Youngest	35.5	Only Child
56.1	Youngest	35.2	Youngest
55.5	Youngest	28.1	Youngest
55.1	Youngest	26.1	Non Youngest
54.0	Oldest of Two	24.6	Non Youngest