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DEVELOPMENTAL STATUS OF INSTITUTIONAL CHILDREN
IN SOCIAL INSTITUTIONS IN THE LEBANON

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TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	iv
TABLE OF CONTENTS	v
LIST OF TABLES	vi
LIST OF FIGURES	vii
INTRODUCTION	1
CHAPTER	
I REVIEW OF THE LITERATURE.....	4
II SAMPLE AND INSTITUTIONS	38
III TESTING PROGRAM	45
IV RESULTS	55
V ANALYSIS AND INTERPRETATION OF DATA	64
VI SUMMARY AND CONCLUSIONS	73
APPENDIX	76
BIBLIOGRAPHY	80

LIST OF TABLES

Table		Page
1	Frequency Distribution of Subjects According to Age in Years	39
2	Frequency Distribution of Subjects According to Religion and Sex	39
3	Characteristics of Subjects in Each of the Seven Institutions	41
4	Distribution of the Subjects in School Classes Used in the Sociometric Test	52
5	Direction and Significance of the Differences in Scores Among the Three Groups	56
6	Mean Scores of the Three Groups	56
7	Mean Scores of the Sub-Groups	58
8	Mean Scores of Religion and Sex Sub-Groups of All Categories	59

LIST OF FIGURES

Figure		Page
1	Type of Subject and Amount of Deprivation from Family	41
2	Mean Scores of the Three Groups	57

INTRODUCTION

There is a vast amount of literature on the subject of family deprivation, and on the institutional type in particular. Attempts to answer the question: "what happens to a child who does not live with a family" have been made by many writers.

The early opinions on this topic were merely from perceptive laymen.⁽¹⁾ At the turn of the century systematic attempts were made to describe the developmental status of the family deprived child.⁽²⁾ The pediatricist Chapin was the first writer who showed scientific awareness in this area through his published observations on "atrophic" infants placed in institutions for long periods.⁽³⁾ A few decades later the educationalists and social workers contributed with some useful studies, for example, those of Theis and Aichhorn in the mid-1920's.⁽⁴⁾

In the late 1940's scientific reports began appearing in the psychological and psychiatric Journals.⁽⁵⁾ The Works of Levy, Lowrey, Bowlby, Goldfarb and others represent the beginning of a serious research approach to the question of institutionalization.⁽⁶⁾ Working independently,

(1) Prugh, G.D., and Harlow, G.R. Masked deprivation in infants and young children. WHO, Deprivation of Maternal Care, Geneva: WHO, 1962, p. 9.

(2) Ibid.

(3) Ibid.

(4) Ibid.

(5) Ibid.

(6) Ibid.

these writers came to the conclusion that early family deprivation is likely to impair a child's ability to get along with others.⁽⁷⁾

During the 1940's and 1950's a tremendous amount of literature was gathered. The general picture of the deprived child in these studies is an unfavourable one. He is shown more often than not, damaged in intelligence, sociability and in other specific aspects.

Apparently not until the 2nd half of the 1950's and the early 1960's has there been enough critical evaluations on the specifics of the problem. The works of Pinneau, Yarrow, Gasler, Ainsworth and many others have made many restrictions and qualifications on the often unwarranted sweeping generalizations concerning the effects of family deprivation. Today it has become clear that the kind of environmental setting in which the family-separated child is placed determines the degree and kind of effect on his personality development. There is more awareness on the role of such variables as age, duration and severity of deprivation and similar other intervening factors.

Comprehensive reviews suggest that there should be more systematic and controlled studies in this field. Working as an Assistant Director in a child care worker in-service training program (in Lebanon) the writer found it specially useful and convenient to study the developmental status of the Lebanese institutional child in a thesis approach. Before making this study there has been no doubt in the writer's mind that the orphans and the foundlings (with whom he has much contact at work) are retarded in many aspects. However, it is the degree as well as the specific kind of

(7) Ibid., pp. 9-10.

effect that are of major concern to him in this study. Is the foundling, for example, more impaired than the orphan with a family background? Is the institutional child, in general, better or worse in academic and intellectual achievement than the poor class child who is living with his family and receiving free-education in government schools. Is non-verbal intelligence sensitive to deprivation? What about sociability and height and weight? All these general basic questions and many other specific ones have been dealt with in this study. From four representative orphanages and three public schools 171 school age children have been selected to be examined on the effect of institutionalization on their personality development and academic achievement.

CHAPTER ONE

REVIEW OF THE LITERATURE

This chapter is planned to serve as a background for a study designed to measure the effects of family deprivation on personality development. It is a review of a representative sample of studies in the literature related to the writer's present study. This review emphasizes the empirical findings of important scientific studies done in the past three decades. There will also be an attempt at relating the important antecedent factors of deprivation to their effects on the development of the child. There will be less emphasis on the methodology of these studies reviewed as it is unrealistic to cover this area together with that of the findings in the space allocated for this chapter.

The first section of this chapter is devoted to the definition of the concept "maternal deprivation" as it is the mother who plays the very important role in the early stages of childhood. The different conditions of deprivation are specifically identified as they are used in the current literature. The second part is a discussion on the importance of the role of the mother in child care, the third presents the findings on the effect of family deprivation and the fourth provides theoretical analysis of the findings presented. The fifth section is a continuation of the analysis but with emphasis on additional variables that are relevant to the causes and effects of deprivation. Section six deals with two important issues, namely, the "reversibility of the effect" and the question of multiple mothering. In section seven there is a discussion evaluating the present status of research.

I. Definition of the Concept.

"Maternal deprivation" is now established as a term to refer to any one or more of the following four conditions of unsatisfactory maternal care. The first condition is the absence of a mother-child relationship due to the physical absence of a mother immediately after birth. An institutionalized orphan in a foundling home is a typical case of this condition.

Secondly, if a child loses his mother after he establishes a relationship with her (which can be done in a few months), he is considered to have entered a period of maternal deprivation as soon as the mother is lost. This state of deprivation will last until a substitute mother takes the original role of the biological mother.

A third condition of deprivation is one where there is an inadequate relationship between a mother and a child. Such relationships have been described in several surveys of child rearing practices.⁽⁸⁾⁽⁹⁾⁽¹⁰⁾ Rejecting and overprotecting mothers, for example, can be considered depriving mothers as they are likely to deprive the child from healthy training. Prugh and Harlow call this case of deprivation 'masked' deprivation.⁽¹¹⁾

The fourth category of deprivation, often called "multiple mothering," is well represented by the case of the children institutionalized in a

(8) Sears, R.R., Maccoby, E.E., and Levin, H. Patterns of child rearing. Evanston, III: Row, Peterson and Co., 1957.

(9) Prothro, E.T. Child rearing in the Lebanon. Cambridge, Mass.: Harvard University Press, 1961.

(10) Cabas, Helen. "Child rearing practices in Greece. Unpublished Master's thesis, Department of Psychology, American University of Beirut, 1961.

(11) Prugh, op.cit., pp. 14-15.

management house (or any other similar setting) to be reared by a number of care-takers who, as a group, fail to provide enough stimulation or are unable to give a secure and healthy family atmosphere.

It is not hard to recognize that these diverse conditions of deprivation may not be present one at a time. The life of a deprived child is often contaminated with a variety of such conditions in different doses and forms. In many social institutions, for example, the children receive insufficient stimulation, are rejected and suffer from inconsistent discipline.

Satisfactory maternal care is summarized by Golfarb, a well-known researcher in this field, in the following qualifications:

1. An affectionate mother.
2. A mother who plays an active role in child rearing practices.
3. A mother who provides a secure and reinforcing atmosphere.
4. A stimulating mother.
5. A mother who succeeds in establishing a mutual relationship with her child. ⁽¹²⁾

II. The Importance of Mother Relationship in Childhood.

Research on family deprivation and the literature on child care emphasize the importance of the role of the mother in early childhood more than they do the role of the father. The famous American study of Sears et al. is an example. In their discussion on the development in the first

(12) Pease, D., and Gardener, D.B. Research on the effects of non-continuous mothering. Child Development, 1958, 29, 143.

five years the authors of this study say: "In all this learning, the mother plays a central part, for she is the most common element in her child's experience. She it is who decides what behavior is changeworthy, and she it is who does the changing or tries to."⁽¹³⁾

The first five years of life appear to be the most important phase of development for the personality. This emphasis on the first five years was forcefully established relatively long ago, since the writings of Freud. By the time a child becomes five years old he develops a self distinct from that of his parents. On the same point Gesell and Amatruda have something to say:

In the development of personality, one of the most critical transitional periods is that between 1, and 2 or 3 years. Woe befalls the child who does not get discriminating individual attention during that difficult period, when more or less simultaneously he is learning to walk, to talk, to acquire a sense of personality identity and of possession, a reciprocal sense of other persons, an adaptation to strange social mores including bladder and bowel control.⁽¹⁴⁾

If the role of the mother in early childhood is emphasized it should not be understood that the father has a negligible function during this early phase of shaping of the personality of the child. The father may have a significant role to play in many of the rearing practices even in the first few years. The father's role in this stage is probably important for the maintenance of the security (physical and psychological) of the home.

Of the family deprivation theorists Andry is probably the most enthusiastic for the consideration of the importance of the role of the

(13) Sears, Maccoby and Levin, op.cit., p. 13.

(14) Gesell, A., and Amatruda, C. Developmental Diagnosis.
New York: Hoeber, 1941, p. 324.

father in the early stages of development.⁽¹⁵⁾ Bowlby, on the other hand, considers the mother's role to be almost an exclusive factor in the socialization of the young child.⁽¹⁶⁾

In testing whether the loss of either parent can act as an independent antecedent variable for the depression reaction, Brown found out that the loss of father or mother was significantly related to depression (at any time during the first fifteen years of life), except in the case of the loss of the father during the first four years.⁽¹⁷⁾ This finding is not surprising. The child during middle and late childhood is continuously and increasingly modeling his personality along the lines set by the values and ideals of his parents. The normal child is also expected to identify more with his parent of the like sex than with the parent of the opposite sex.

III. Effects of Deprivation.

Research reviews present an abundance of evidence to the effect that maternal deprivation can be associated with far-reaching damage in the development of the deprived child in many sectors of the personality. Outstandingly numerous are the studies that reveal the adverse effects on general intelligence, language, and the capacity to form healthy interpersonal rela-

(15) Andry, G.R. Paternal and maternal role and delinquency. W.H.O. Deprivation of maternal care. Geneva: W.H.O., 1952, p. 43.

(16) Bowlby, J. Maternal care and mental health. Geneva: W.H.O., Monogr., 1951, No. 2, p. 34.

(17) Brown, F. Depression and childhood bereavement. J. ment. Sci., 1961, 107, 762-765.

tionships.⁽¹⁸⁾⁽¹⁹⁾⁽²⁰⁾⁽²¹⁾ Different sources will now be presented to show the diverse effects of deprivation on general and specific processes of development.

A. Effects on General Intelligence.

Some studies of intellectual development present data showing mild retardation and others reveal severe adverse effects. The degree of effect is, naturally, related to the severity of deprivation. If deprivation is experienced early in childhood and for a period of more than two or three years then retardation is likely to occur.

A representative sample of studies which reveal small adverse effects of mild deprivation on general intelligence will be discussed first. In studying a young group of children ranging in age between four months and two-to-five years and institutionalized before the 3rd month of age, Dupon and Roth found that the children's Gesell developmental status was relatively low but not significantly so.⁽²²⁾ The children tested were reared in a hospital type residential nursery which provided a fair amount of individualization in child care.

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- (18) Glaser, K., and Eisenberg, L. Maternal deprivation. Pediatrics, 1956, 18, 625-640.
- (19) Yarrow, J.L. Maternal deprivation: Toward an empirical and conceptual re-evaluation. Psychol. Bull., 1961, 58, 459-490.
- (20) Ainsworth, D.M. The effects of maternal deprivation: a review of findings and controversy in the context of research strategy. W.H.O. Deprivation of maternal care. Geneva: W.H.O., 1962.
- (21) Bowlby, op.cit.
- (22) Dupon, R.P., and Roth, S. The psychologic development of a group of children brought up in a hospital type residential nursery. J. Pediat., 1955, 47, 124-129.

Rheingold compared the intellectual status of two groups of institutional infants, 6-8 months old and institutionalized in early infancy, using Cattell test and measured their social responsiveness.⁽²³⁾ One of the two groups was given intensive mothering (the experimental group) during the last two months of the pre-testing period and the other was left under routine discipline of the institution. Intensive mothering appeared to increase the social responsiveness and verbal ability of the experimental group to a substantial degree. However, in developmental quotient the control group did not fall significantly short of the experimental one.

Incidentally it should be mentioned that in a follow up study made a year later the discrepancy in sociability between the two groups had disappeared, for the children had been released for foster or adoption homes after the initial testing was made.⁽²⁴⁾

The work of Gardner and Swiger can also be cited here to show that institutionalization may be almost harmless when the environment provided for the children is stimulating or when the duration of deprivation is not long enough.⁽²⁵⁾

Freud and Burlingham reported from clinical observations that nursery infants are at a disadvantage in intellectual performance.⁽²⁶⁾

(23) Ainsworth, op.cit., p. 129.

(24) Rheingold, H.L., and Bayley, N. The later effects of an experimental modification of mothering. Child Develop., 1959, 30, 363-372.

(25) Gardner, D.B., and Swiger, M.K. Developmental status of infants released for adoption. Child Develop., 1958, 29, 521-530.

(26) Yarrow, op.cit., . 465.

Fisher, Klackenberg and many others also show that mild deprivation has mild effects on general intelligence.⁽²⁷⁾

More handicapping environments have more serious effects. Dennis and Najarian studied two groups of foundling home children in Lebanon.⁽²⁸⁾ One group was in the first year of infancy, and the other was between 4.5 and 6 years of age. Both groups were institutionalized shortly after birth. In the younger group there were 49 subjects and in the pre-school group there were 30. Both groups were matched by a control group whose subjects came from intact families. The physical environment of the institution was good but there was not enough stimulation and training as there were too few child-care workers in this institution. The infant was left most of the time lying on his back in his crib; there was little individual attention. This study revealed that the development quotient of the foundling children was substantially lower than that of the control group between the 3rd and 12th month. However, the investigation also revealed that the pre-school group was not seriously retarded on the Goodenough and 2 other intelligence tests. The kindergarten training which each child received starting age four was an important factor in the improvement of the intellectual functioning of these children.

Skeel et al., present a study which revealed severe consequences of early institutionalization on general intelligence. The authors of this study had two groups of subjects, one experimental and another control.

(27) Ibid.

(28) Dennis, W., and Najarian, P. Infant development under environmental handicap. Psychol. Monogr., 1957, 71, No. 436.

The age at the time of institutionalization was between birth and two years. The control Ss showed progressive drop in IQ score, whereas the experimental Ss who received nursery school training maintained their intellectual performance at a stable level, though it was still below normal.⁽²⁹⁾

Using the Gesell test, Gesell and Amatruda, reporting on institutionalized infants below two years of age, describe their subjects as inferior.⁽³⁰⁾ Unfortunately data on age of placement, number of Ss and kind of environment is missing in this study. A much more criticized, although often quoted, piece of research is that of Spitz.⁽³¹⁾ Spitz report a big drop in developmental quotient (D.Q.) of a group of foundling home infants. Spitz believes that the drop occurred as a result of maternal separation which happened to these babies beginning during their fourth month. Pinneau criticized Spitz by showing clearly that maternal separation occurred in most of the cases after the biggest drop in D.Q. was observed.⁽³²⁾ Studies made on older children present evidence on the effect of early deprivation on the development throughout childhood. Bowlby's review of the literature in the WHO publication mentions numerous sources to support the thesis that there are severe adverse effects due to deprivation of maternal care in early childhood.⁽³³⁾ Bowlby cites a number

(29) Yarrow, op.cit., p. 465.

(30) Ibid., p. 462, 464.

(31) Spitz, R.A. Hospitalism: An inquiry into the genesis of psychiatric conditions in early childhood. Psychoanal. stud. Child., 1945, 1, 53-74.

(32) Pinneau, R.S. Infantile disorders of hospitalism, Psychol. Bull., 1955, 52, 429-452.

(33) Bowlby, op.cit., pp. 15-45.

of follow up studies on subjects in their middle childhood and early adolescence who experienced deprivation for some time in the first few years of their development. The performance of these subjects provides a rich source of evidence supporting Bowlby's position.

Bowlby considered Golfarb's follow up studies to be among the best of their kind.⁽³⁴⁾ In his three major works Golfarb traced the development of intelligence (as measured by Wechsler test) of a group of children who were institutionalised from early infancy until the age of three and were then placed in foster homes. In the control group which Golfarb used, the children were put in foster homes directly after their mothers abandoned them, usually before the ninth month. The factor of heredity, according to Bowlby, was controlled in the two samples matched. The sample that was studied intensively was composed of 15 pairs of children between the age of 10 and 14. The environment in the institution was characterized as severely restricting and with little opportunity for social contacts with adults. Results of Wechsler testing revealed a significant difference between the two samples, favouring the subjects who had had no institutional background. However, in one of his later studies Bowlby et al. did not find significant difference in intellectual achievement between two groups of children, one with an institutional background during sometime before the fourth year of childhood and another non-deprived group. The two samples were between 6 and 13 at the time of study.⁽³⁵⁾ In her review, Ainsworth, one of the

(34) Ibid., p. 36.

(35) Yarrow, op.cit., p. 475.

authors of this study, described this work "as ill designed to detect the effects of deprivation that had been hypothesized on the basis of early case studies and confirmed by Golfarb."⁽³⁶⁾

Although most of the authorities in their critical reviews came out with a definite conclusion on the effect of deprivation on general intelligence, it seems necessary to go further in research in order to assess with more exactness the degree and duration of intellectual damage related to deprivation.⁽³⁷⁾⁽³⁸⁾

B. Effects on specific intellectual processes.

Results of scientific studies show that the specific processes of intelligence are not affected equally by deprivation. Yarrow reports in his comprehensive and critical review that language, time and space concepts, and capacity for abstract conceptualization are consistently vulnerable to deprivation.⁽³⁹⁾

Many studies have revealed that the verbal ability of young children can be retarded considerably as a result of living in a restricting environment.⁽⁴⁰⁾⁽⁴¹⁾⁽⁴²⁾⁽⁴³⁾

(36) Ainsworth, op.cit., p. 120.

(37) Ibid., pp. 97-165.

(38) Yarrow, op.cit., 459-490.

(39) Ibid.

(40) Dupon and Roth, op.cit., 124-129.

(41) Freud, A., and Burlingham, O.I. Infants without families.
New York: Internat. Univer. Press, 1944, pp. 16-20.

(42) Gesell and Amatruda, op.cit., p. 324.

(43) Reingold, op.cit., 565-573.

In later childhood, the adverse effect on language usually persists. Goldfarb reports that speech disability in late childhood is associated with the deprivation of the first few years.⁽⁴⁴⁾ This finding, according to Bowlby, confirms Lowrey's earlier data on the same area of investigation.⁽⁴⁵⁾ With the help of standard achievement test, Feinberg studied the academic achievement of a group of children who were living away from their own homes.⁽⁴⁶⁾ Comparing the deprived group with a control teenage group, he found that the former significantly handicapped in language usage.

From a study of Bakwin it is interesting to note that over-protected children tend to be at an advantage in language due to the verbal over-stimulation which they usually receive from their overconcerned parents.⁽⁴⁷⁾

On the ability to conceptualize, Bender and Goldfarb have relevant data.⁽⁴⁸⁾ These two authors found that children who had been deprived in early childhood and were tested later exhibited a disability in conceptualization with clinical testing tools.

(44) Bowlby, op.cit., p. 38.

(45) Ibid.

(46) Feinberg, H. Achievement of children in orphan homes as revealed by the Stanford Achievement Test. J. Genet. Psychol., 1954, 85, 217-229.

(47) Bakwin, H. Pure maternal overprotection. J. Pediat., 1948, 33, 791-792.

(48) Yarrow, op.cit., 466.

Motor development, spacial and temporal conceptualization are also mentioned among the sub-faculties of intelligence which are specially vulnerable to deprivation of maternal care. (49)

The existing data on the effect on the specific processes of intelligence, excluding the evidence on language, still seem to be far from sufficient.

C. Effects on interpersonal relationships.

Many studies show that deprivation in the early years has immediate and strong effects on the capacity of developing interpersonal relationships. Spitz, in his later reports, found that his institutionalized infants who were separated from their mothers exhibited 'anaclitic depression'. (50) It is mentioned by Bowlby that 'anaclitic depression' is a typical reaction of separated infants which appears usually in the second half of the first year. (51) Bowlby considers this reaction a prototype of adult depressive reactions and describes it in the following way:

The emotional tone is one of apprehension and sadness, there is a withdrawal from the environment amounting to rejection of it, there is no attempt to contact a stranger and no brightening if this stranger contacts him. Activities are retarded and the child often sits or lies inert in a dazed stupor. Insomnia is common and lack of appetite universal. Weight is lost and the child becomes prone to intercurrent infections. The drop in D Q is precipitous. (52)

Freud and Burlingham judge their infants to be weak in social responsiveness as they were unable to establish deep relationship with their care-takers.

(49) Ibid.

(50) Bowlby, op.cit., p. 22.

(51) Ibid.

(52) Ibid.

The inadequacy in social responsiveness was observed either in the form of withdrawal or excessive demanding approaches.⁽⁵³⁾ An interesting observation made by the authors was that many strong friendships occurred among the deprived infants.⁽⁵⁴⁾ This is expected as there is some kind of security gained in these friendships.

Studying the development of the reaction to separation of a group of infants, Bowlby noticed that in the initial stage the response is characterized by violence, complaints and demands.⁽⁵⁵⁾ After some time the infant inhibits his overt responding to separation. He denies his need for love and starts to be subtle and defensive in expressing his hostility to his mother.⁽⁵⁶⁾ However, when the child becomes old enough to be able to express his hostility in an active way he turns to sociopathic activities. Bowlby studied retrospectively 44 juvenile thieves and reported that there is a strong relation between deprivation and delinquency. In this study Bowlby coined the term 'affectionless character' to describe his sociopathic subjects. He believed that deprivation in early childhood is an important factor related to delinquency.⁽⁵⁷⁾

Describing the sociopathic deprived character Bowlby says:

(53) Freud, and Burlingham, op.cit., pp. 27-28.

(54) Ibid., p. 48.

(55) Bowlby, J. Some pathological processes set in train by early mother-child separation. J. ment. Sci., 1953, 99, 265-272.

(56) Ibid.

(57) Yarrow, op.cit., 468.

Here in brief, are many of the typical features: superficial relationships; no real feelings, no capacity to care for people or to make true friends, an inaccessibility, exasperating to those trying to help; no emotional response to situations where it is normal - a curious lack of concern; deceit and evasion, often pointless; stealing; lack of concentration at school.⁽⁵⁸⁾

Other workers have located an equally abnormal symptom which is diametrically opposite in nature to the affectionless syndrom. Bender and Lowrey and several other researchers found in their retrospective studies a clinical cluster of reactions often named 'affect hunger', i.e., over-demanding behavior revealing an intense desire for recognition.⁽⁵⁹⁾

Ainsworth presents several studies to support the thesis that family separation is a predisposing factor for character disorders. He mentions the studies of Glueck and Glueck, Earl and Earl, and Wardle as evidence which relates antisocial behavior with maternal separation.⁽⁶⁰⁾

Harlow's recent experimental work with monkeys supports the work done on the human level.⁽⁶¹⁾ Harlow arranged a materially depriving environment for a group of monkeys and observed their social behavior during and after deprivation. The monkeys were observed to be 'heartless' with 'sociopathic syndromes!'

The work done in the last ten years has shown that the findings by Bowlby, Bender, Lowrey and other researchers who had found very serious effects of deprivation has been challenged by a number of studies.

(58) Bowlby, op.cit., p. 31.

(59) Yarrow, op.cit., 469.

(60) Ainsworth, op.cit., pp. 113-116.

(61) Harlow, H. The nature of Love. Amer. Psychologist, 1958, 15, 673-685.

Three of these challenging studies are cited here to show the recent developments in attitude toward the topic of maternal deprivation: An interesting study is reported by Lebovici, one of the several contributors to the second WHO review on maternal care. In his criticism on Bowlby's view on the effect of deprivation Lebovici cites Howell's study as evidence against the opinion which asserts that there is a close relation between separation from mother and character disorder.⁽⁶²⁾ In the same review Andry has another chapter in which he reviews the literature on deprivation.⁽⁶³⁾ Andry published a report recently in which he showed that maternal separation per-se may not be an important independent variable related to delinquency.⁽⁶⁴⁾ Selecting a sample of 160 boys between 11 and 15 years of age ($\frac{1}{2}$ of the sample delinquents and $\frac{1}{2}$ normal), Andry found that disturbed child-father relationship, irrespective of whether early separation had occurred, was the responsible factor for delinquency in his sample. Finally, Bowlby himself, together with his collaborators, reported in a study mentioned earlier in this chapter that the boys who were incapacitated socially in his sample of children ranging between 6 and 13 years of age and having an institutional background were the minority. The authors draw a conservative qualified conclusion on the incidence and degree of long-termed effects of maternal deprivation in early childhood.⁽⁶⁵⁾

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- (62) Lebovici, S. The concept of maternal deprivation: A review of research. In WHO, Deprivation of maternal care. Geneva: WHO, 1962, p. 89.
- (63) Andry, op.cit., pp. 31-62.
- (64) Ibid., p. 37.
- (65) Yarrow, op.cit., 475.

D. Miscellaneous abnormal symptoms.

There is more data to be presented in this section on the effects of maternal deprivation revealed in a variety of clinical pictures ranging in seriousness from actual death to other less detrimental results such as selfishness, aggression, and so on.

1. Miscellaneous physical effects.

Spitz reports a high rate of mortality among foundling home infants.⁽⁶⁶⁾ It is the opinion of Spitz and many other writers that it is the poor medical care rather than the psychologically depriving environment which causes this high rate of mortality in many social institutions. There is also a lot of evidence on the effect of poor care in social institutions on the susceptibility to diseases, e.g. anemia, merasmus, eczema and diarrhoea.⁽⁶⁷⁾ A recent unpublished medical report found that the children of a Lebanese foundling home suffer from anemia, skin diseases and low height and weight at any stage between the early period of infancy and the sixth year.⁽⁶⁸⁾ The author of this study relates these results to poor medical and psychological care.

2. Miscellaneous psychological effects.

A wide variety of abnormal effects has been reported in many studies on deprivation. There is room here only for a very few of the most representative studies. Lowrey studied a group of children who were institutionalized before their first birthday for a period of 3 to 4 years

(66) Spitz, Psychoanal. stud. Child., op.cit., op.cit., 54.

(67) Prugh and Harlow, op.cit., p. 10.

(68) Milli, N. The nutritional status of children living in a foundling home in Lebanon. Unpublished Medical Report, American University Hospital, Beirut, 1963.

before they were released for foster homes. Among the clinical pictures observed were aggressive reactions, negativistic responses, "selfishness" and enuresis.⁽⁶⁹⁾ In a reception center, Hilda Lewis found a significant relation between mild maladjustment and mother separation before two years of age.⁽⁷⁰⁾

Among deprived adolescents Goldfarb found impulsivity, Bowlby reported stealing, and Haggerty discovered schizophrenic tendencies.⁽⁷¹⁾⁽⁷²⁾ Harlow reports that a group of adult monkeys exhibited neurotic symptoms due to separation from mother and deprivation from social contact experienced in infancy.⁽⁷³⁾

In most of the studies, the incidence of damage related to deprivation is less than 100 per cent. Some studies even show that the incidence is below the significant level of confidence. Studying the effects of deprivation on the academic achievement of school children, Gardner and Hawkes did not find a reliable difference between one group with a brief institutional background and another one matching in age and intelligence.⁽⁷⁴⁾

(69) Bowlby, op.cit., p. 39.

(70) Lewis, H. Deprived children. Toronto: Oxford Univer. Press, 1954, pp. 71-62.

(71) Bowlby, op.cit., p. 30.

(72) Ibid., p. 38.

(73) Harlow, op.cit.

(74) Gardner, D.B., Hawkes, C.P., and Burchinol, L.G. Noncontinuous mothering in infancy and development in later childhood. Child developm., 1961, 32, 225-236.

IV. Antecedent variables.

So far the writer has been reporting the findings of many researchers avoiding analysis as much as possible. It is time now to discuss the etiology of the maldevelopment associated with family deprivation. Strictly speaking the term family deprivation is certainly not a technical one. The relation between deprivation of home care and maldevelopment can be soundly stated in the following hypothesis: Insufficient and/or poor learning conditions usually existing in the environment of a growing young child who is not living with his family are the antecedent factors for the formation of the kind of habits that fail to meet the needs of normal child development.

Family deprivation theorists describe the environment in which their deprived subjects live in varying degrees of detail. The writer finds it suitable to classify the diverse depriving conditions reported in the literature into four distinct categories:

- A. Lack of object stimulation.
- B. Lack of human stimulation.
- C. Lack of reinforcement.
- D. Insecurity.

Some or all of these four categories are usually present in varying order and different degrees.

A. Lack of object stimulation.

The environment of social institutions is usually characterized by a paucity in objects such as games or toys which are usually used to stimulate and encourage the child to learn and develop normally. The institutional child usually has less chance to move freely before he himself

becomes capable of walking independently. Thus by the time he becomes able to walk freely, the institutional child will have already missed the sensory stimulation present outside his limited and relatively stable environment.

There are probably very few researchers who doubt the presence of adverse effects of sensory deprivation. However, there is serious disparity among different opinions in the evaluation of the importance of this factor. Bowlby and Spitz do not seem to consider sensory stimulation as a primary etiological factor in maternal deprivation, whereas Casler, Yarrow, Glaser and Eisenberg do.⁽⁷⁵⁾⁽⁷⁶⁾⁽⁷⁷⁾⁽⁷⁸⁾⁽⁷⁹⁾ Glaser and Eisenberg express their attitude on this point very clearly. "... among the fundamental needs of the infant are requirements for gentle physical contact, sounds of pleasant and varying tones of the human voice, antigravity play, visual stimuli from the human environment and the more subtle interpersonal communications."⁽⁸⁰⁾

(75) Bowlby, (Monogr.), op.cit., pp. 52-58.

(76) Spitz, Psycho. anal. stud. Child., op.cit., 70.

(77) Casler, L. Maternal deprivation: A critical review of the literature. Monogr. Soc. res. child Develpm., 1961, 26, 64 pp. (Abs).

(78) Yarrow, op.cit., 461.

(79) Glaser and Eisenberg, op.cit., 626.

(80) Ibid., p. 626.

Weininger, Hebb and Harlow are among the known experimenters who showed the importance of stimulation and contact for the normal development of animals, and in the case of the latter, for men.⁽⁸¹⁾⁽⁸²⁾⁽⁸³⁾ The threshold of responsiveness seems to be lowered with stimulation; the sense receptors become less sensitive. Object stimulation has been specifically identified as an important variable in development by many other studies.⁽⁸⁴⁾⁽⁸⁵⁾⁽⁸⁶⁾⁽⁸⁷⁾ In the opinion of Margaret Ribble tactile, kinesthetic and sound experience are of special significance for the sensory development of the infant.⁽⁸⁸⁾

B. Lack of social stimulation.

Institutionalized children are "protected" more to survive than to be "prepared for life". In many countries standards for institutional child-care are absent. The children living in an institution usually have few opportunities to contact the "outside world"; their activities are limited and things are worked out for them in a routine fashion and on a

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- (81) Weininger, O. The effects of early experience on behavior and growth characteristics. J. comp. and physiol. Psychol., 1966, 49, 1-9.
- (82) Lebovici, op.cit., pp. 87-88.
- (83) Harlow, op.cit., 673-685.
- (84) Dennis and Najarian, op.cit.
- (85) Wellman, B., and Pegram, E.L. Binet IQ changes of orphanage pre-school children: A re-analysis. J. genet. Psychol., 1944, 65, 239-263.
- (86) Spitz, Psychoanal. stud. Child., op.cit., 53-74.
- (87) Ribble, M. Infantile experience in relation to personality development. In Mcv. Hunt (Ed.) Personality and the behavior disorders, Vol. 2. New York: Ronald Press, 1944, p. 631.
- (88) Ibid., p. 631.

group level; there is not enough individualization.⁽⁸⁹⁾⁽⁹⁰⁾ The child-care workers are overburdened with duties as they are usually too few to be able to handle individual differences and give enough training and contact to every child.⁽⁹¹⁾

C. Lack of reinforcement.

Mothers or care-takers of deprived children are more often than not ignorant of the value of behavioral control through positive reinforcement. The dearth in number of care-takers, their ignorance of the essentials of mental hygiene and their impatience are commonly observed to characterize the social environment of the institution.

Moreover, the care of orphans, the "illigitimates" or the "social cases" does not satisfy a maternal feeling as well or as often, as it does to a natural mother. Thus the care-taker's mothering behavior in contrast to that of the biological mother is not likely to be reinforced to be maintained at an active level. In this kind of a situation the negative effects are likely to accumulate with time as there is a feed-back in the interplay between the care-taker and the deprived child.⁽⁹²⁾ Lack of reinforcement predisposes depression of responsiveness (failure) and depression makes the care-taker less motivated (anger and dissatisfaction) to reward the child's activity, and so on.

(89) Feinberg, op.cit., 228.

(90) Bakwin, H. Emotional deprivation of infants. J. Pediat., 1949, 35, 516-517.

(91) Yarrow, op.cit., 461.

(92) Feinberg, op.cit., 217-218.

The child also needs a person who can stand as a model for identification. The lack of reinforcement does not foster a strong personal tie between the child and the mothering figure. The identification of a child with an adult comes gradually with mutual love and respect between the child and the identified agent.⁽⁹³⁾

D. Insecurity.

The kind of tie that a child develops with his mother (or mother figure), the most common object of experience in his environment, determines the nature of impressions that he will have about the world in general.⁽⁹⁴⁾ The feelings of the child have a lot to do with the way he develops. Spitz believes that the negative psychological effect associated with mother separation is the factor responsible for the depression in DQ.⁽⁹⁵⁾ Orphanages, nurseries and home-management centers do not provide one mother substitute for each baby. The child's relation with his caretaker is likely to be non-continuous and unstable. There are many sources of love objects, and these sources may be inconsistent in their demands and expectations. If this is the case it should not be surprising to find the insecure baby maldeveloping. Bowlby stresses the importance of mother continuity. In describing the negative effect he says: "All they had had was a succession of adhoc agents each helping them in some limited way, but none providing continuity in time, which is the essence of ego functioning. There is no opportunity to learn the process of abstraction

(93) Freud and Burlingham, op.cit., p. 125.

(94) Berg, M., and Cohen, B.B. Early separation from mother in schizophrenia. J. nerv. ment. Dis., 1959, 128, 369.

(95) Spitz, R.A. Reply to Dr. Pinneau. Psychol. Bull., 1955, 52, 456.

and the organization of behavior in time and space."⁽⁹⁶⁾

In the case of the child who is separated from his mother after he has had the chance of establishing a tie with her there is serious distress, fear and depression.⁽⁹⁷⁾⁽⁹⁸⁾⁽⁹⁹⁾ If these mixed feelings of insecurity are not treated with a new warm mother substitute the usual adverse effects of deprivation are expected.⁽¹⁰⁰⁾⁽¹⁰¹⁾ Feinberg adds a point when he describes the institutional child as having feelings of inferiority and guilt; (What has he done to deserve being parentless?)⁽¹⁰²⁾

V. Other relevant variables.

It has been indicated so far that deprivation of care is likely to be associated with the maldevelopment of the personality of the growing child. The seriousness of the damage that may be caused by the factors usually prevalent in a depriving state of affairs is determined by a multiplicity of variables which lie in a given context of deprivation. The age of the child, his experience before deprivation, the degree of stimulation, his stamina and finally, the cultural setting which sets the maternal role - all these factors interact to determine the severity of effect of deprivation of maternal care.⁽¹⁰³⁾

(96) Bowlby, op.cit., p. 55.

(97) Yarrow, op.cit., 473-474.

(98) Brown, F. Depression and childhood bereavement. J. ment. Sci., 1961, 107, 754-777.

(99) Bowlby, J. ment. Sci., op.cit., 265-272.

(100) Freud and Birlingham, op.cit., 29-36.

(101) Ainsworth, op.cit., pp. 123-124.

(102) Feinberg, op.cit., 217.

(103) Yarrow, op.cit., 464-465.

A. Age: The phase of development which the child is passing through when he faces the separation from his family is an important factor to be considered in interpreting the effects of deprivation.⁽¹⁰⁴⁾ Several studies suggest that there is a critical phase of development for various mental, physical and social processes existing at different periods in the life of the growing child.⁽¹⁰⁵⁾ This critical phase phenomenon is likely to pre-dispose the child facing deprivation at a given age to differential sensitivity of the different kind of processes of development.⁽¹⁰⁶⁾ During the first year the infant is relatively very vulnerable in the physiological aspect in responsiveness to deprivation.⁽¹⁰⁷⁾ In the second half of the first year the baby is most sensitive in DQ. The second, third and fourth years are characterized by fast development in language; a depriving restricting environment is particularly detrimental.⁽¹⁰⁸⁾ The first five years of life are of the greatest importance to the learning of social values which regulate the development of the ego and superego. In general, it seems that there is a tendency for the effects to become milder and milder with the advancement of the general maturity of the child.⁽¹⁰⁹⁾

B. Pre-deprivation experience: A child who enjoyed the benefits of a warm and consistent mother-relationship for some time would be expected to

(104) Ibid., 464.

(105) Ainsworth, op.cit., p. 152.

(106) Ibid.

(107) Glaser and Eisenberg, op.cit., 636.

(108) Gesell, A. et al. The first five years of life. New York; London: Harper and Brothers Publishers, 1940, p. 13.

(109) Ainsworth, op.cit., p. 153.

react violently to a sudden separation from his mother.⁽¹¹⁰⁾ However, it may not be very hard to replace his previous maternal relation through a mother substitute who is equally efficient.⁽¹¹¹⁾ The less a child is indulged, the better are the chances for his escape from the ills of maternal deprivation. Overdependent children are probably less ready to face separation from mother than normal ones.⁽¹¹²⁾

C. Degree of stimulation and duration of deprivation: If the deprivation is in a context of severe lack of physical, social and emotional stimulation the effects will naturally be very serious. Freud and Burlingham have clearly observed the decrease in damage with the improvement on the degree of stimulation on the deprived nursery child.⁽¹¹³⁾

It follows from the reasoning made above that the duration of deprivation is directly related to the severity of its effects. The increase in the effect associated with the increase in duration of deprivation is not systematic. The other relevant variables are too numerous to allow for a simple relation between the duration of deprivation and the degree of its effects. The "critical phase" phenomenon is among the important factors which interrupt the linearity of the curve representing this relation. Deprivation at two, for example, is much more serious than it is at ten.

(110) Yarrow, op.cit., 473.

(111) Ibid., 476-479.

(112) Ibid., 476.

(113) Freud and Burlingham, op.cit., pp. 53-74.

D. Individual differences:

Different children react to objectively similar depriving situations differently. The child who has an excellent constitutional make-up is probably less vulnerable to a depriving environment than the child who is average or below. Some authors believe that congenital factors and illnesses are primary etiological factors in the clinical picture of the institutionalized child.⁽¹¹⁴⁾ Others are not sure whether the heredity or the environment have the first claim on the effects.⁽¹¹⁵⁾ There is no doubt that the environment has a lot to do with the etiology of the effects associated with deprivation, but, the seriousness of the role that the constitutional factors can play is not yet determined.

VI. Two important issues.

A. Reversibility of effects.

The question of the reversibility of the adverse effects of maternal deprivation is a very important one. The answer to this yet unsettled issue is a direct evaluation of the seriousness of the general question of deprivation of maternal care. Psychologists are no more anxious to state this problem in an either - or manner; it is the degree of reversibility and the kind of regain, that are debatable at the present.⁽¹¹⁶⁾ Can the damage be recovered substantially? If the answer is in the positive, under what conditions or through what events?

(114) Lebovici, op.cit., pp. 83-84.

(115) Bodman, F., et al. The social adaptation of institution children. Lancet, 1950, 1, 175.

(116) Yarrow, op.cit. 482-483.

The psychoanalytic view of this question is relatively pessimistic. Psychoanalysts believe that deprivation of maternal care in the early stages of childhood can reinforce the building of defense mechanisms which are likely to arrest the development in various important ego processes throughout childhood. The chances for disarming these defences are little, as it is very hard to regain the lost experience which was crucial for normal development at the specific critical psychosexual stages in early childhood. (117)

The behavioristic opinion on this issue is considerably less pessimistic. The developmental process is important at any stage of childhood. Prognosis of deprivation is hopeful when one can arrange a better family environment for the deprived child in order to re-condition him with better learning conditions. The question is a simple matter of extinction of unadjustive habits and re-building (through training) new healthy ones.

Finally, it should be said here that during the past ten years research work has been demonstrating increasingly the reversibility of effects attributed to deprivation conditions. (118) However, works which took care of all the basic variables involved in this question are not present yet. The studies of Reingold, Lewis, Freud and Burlingham, Dennis and Najarian and those of others are too limited to allow one to reach

(117) Hall, C. Primer of Freudian Psychology. New York: New American Library, 1954, pp. 72-115.

(118) Ainsworth, op.cit., p. 155.

definite and specific conclusions. (119)(120)(121)(122)

B. One vs. many mothers.

Is multiple mothering a sufficient condition for deprivation?

There is more than one point of view on this question. Bowlby and Ainsworth in their comprehensive reviews agree on the opinion that every child should have a major mother figure who can give warm, continuous and consistent care. (123)(124) Ainsworth describes the only acceptable state of multiple mothering in the following statement:

The disposal of responsibility for the care of the child among several (not many) figures who together give sufficient care, and who have a high degree of continuity (this pattern exists in many families, even in Western societies, where there is a major mother-figure who is chiefly responsible for the child's care, but whose care is supplemented by that of other members of the household; it is also characteristic of some experimental societies such as the Israeli Kibbutzim). (125)

Although Mead seems to agree with Bowlby and Ainsworth on the fact that sufficiency and continuity of maternal care are important, she does not regard the "major mother-figure" to be very necessary in mothering. (126)

To support her thesis Mead reports enough challenging evidence from studies

(119) Rheingold. The measurement of maternal care. Child Developm., 1960, 31, 665-573.

(120) Lewis, op.cit.

(121) Freud and Burlingham, op.cit.

(122) Dennis and Najarian, op.cit., (No. 436).

(123) Bowlby, op.cit., pp. 52-63.

(124) Ainsworth, op.cit., pp. 145-146.

(125) Ibid., pp. 144-145.

(126) Mead, M. A cultural anthropologist's approach to maternal deprivation. In WHO, Deprivation of maternal care. Geneva: WHO, 1962, pp. 55-57.

made on primitive cultures. The conclusion of Yarrow on this issue is again different from that of Bowlby and Ainsworth. Yarrow does not think that multiple mothering is necessarily depriving; if other conditions are favourable there is no reason to consider this state to be harmful. (127)

VII. Evaluation of research.

Research on maternal deprivation is relatively large and its value is significant for the development of theory in child development and for its implications in child care services. Many important generalizations can at the present stage be made from the existing literature. However, there is still a considerable uncertainty about the relations hypothesized between the specific antecedent variables and the diverse effects observed in the area of family care. Pointing to some of the basic flaws that exist in the available research work may help at this point to account for the apparent contradictions in the details of data mentioned earlier in this review.

A. Limitations related to the subjects.

Due to the diversity of variables involved in the topic of maternal care many representative subjects need to be studied in each trial in order to reduce the chances of error in generalizing. It is also important to match the group to be studied with a similar group to control all factors which are likely to interfere considerably with the results to mask the "pure" effects of the independent variable being tested. The first condi-

(127) Yarrow, op.cit., 479.

tion stated above has been neglected by many researchers - in particular researchers on maternal separation - in their choice of clinical subjects who are likely to have other contaminating conditions. (128) Moreover, control groups are not infrequently absent, and when present they are not always matching enough. (129)

B. Age at time of study.

Most of the available studies were carried out on young children. It is known that psychometric tools of early childhood are in general not very valid. Due to this technical limitation there is a large room for error in the interpretation of data. Specific caution should be taken when the results are taken from a group test for young children.

C. Period of deprivation.

Many studies do not specify accurately the age range during which there was no satisfactory maternal care. (130) Considering the "critical phase" phenomenon there should be better awareness of the importance of knowing the kind of stage of development that suffered most from deprivation.

D. Personality tests and clinical data.

Many of the generalizations made on the effects of deprivation were drawn from personality tests and clinical experience. Personality tests are not yet developed enough to give very reliable data. Clinical observations also have their serious shortcomings.

(128) Ibid., 460.

(129) Ibid., 462-463, 467.

(130) Ibid., 460.

E. Description of environment.

Few studies give enough information on the kind of environment which the deprived subjects faced. The studies of Reingold and Dennis and Najarian are notably good for having detailed description of the maternal environment of their subjects. (131)(132)

Summary and Conclusions.

Deprivation of family care may exist in four different forms:

(1) An absence of a relationship with a mother-figure. (2) A break of a relationship with a mother figure. (3) A distorted relationship with a mother figure, and (4) A non-continuous inconsistent multidimensional mother relationship. These four different sorts of deprivation are often present in mixed orders and varying degrees.

It has been indicated by several studies that any one of these distinct forms of deprivation can be associated with significant adverse effects on personality development. The degree, duration and nature of damage associated with deprivation is determined by the duration and severity of the deprivation experience itself, the past history of the deprived, his age and his general capacity.

It can be concluded that deprivation which begins in early infancy and lasts for a few years (3 or more) is likely to be associated with substantial and deeprooted adverse effects on general intelligence, language, interpersonal relationships and general adjustment. Additional relations between deprivation and more specific personality characteristics

(131) Rheingold, H.L. The measurement of maternal care. Child Developm., 1960, 31, 565-573.

(132) Dennis and Najarian, op.cit., No. 436 .

(e.g. stealing, delinquency, physical damage, dependence, "selfishness", aggression, enuresis and other neurotic symptoms) have been proposed in a large variety of studies. The degree of confidence and the contradictions in the specifics of data do not allow for the acceptance of these additional relations without great caution and consideration to the multiplicity of factors involved in the area of maternal care.

The etiology of family deprivation effects has been analyzed into 4 main distinct independent variables: (1) Lack of physical stimulation. (2) Lack of social stimulation. (3) Lack of reinforcement. (4) Lack of security. All of these factors are different cases of poor or insufficient learning conditions which foster maldevelopment in personality.

The damage related to deprivation may be repaired by subsequent conditioning of new adjustive habits with simultaneous extinction of old unadjustive skills. In many cases the reversibility is practically impossible; sensory damage and deeply entrenched defensive habits of adjustment are usually irreparable.

The question of multiple mothering was discussed. Multiple mothering is not infrequently a case of deprivation. However, in its special case where there is sufficiency in social, physical and emotional stimulation there is no harm attributable to it.

Research on this topic needs much more development to fill the empirical gaps existing among the general findings. More ambitious systematic studies are needed, ones which can control simultaneously a cluster of important variables in order to study the "pure" effects of each condition at a time and also to be able to find the results of the various factors interacting with each other.

The attitudes of researchers on maternal deprivation have been shifted notably in the last ten years to a more subtle and conservative side.⁽¹³³⁾ This shift is considered a developmental step toward progress as it has useful implications in the theory of child development and practices in social work.

Behaviorism, the more optimistic view on this question, seems at present to be having the upper hand as a frame of reference to the findings which relate the cause-and-effect variables of family deprivation.

(133) Yarrow, J.L. Interdisciplinary and international deprivation. Contemp. Psychol., 1963, 8, 446.

CHAPTER TWO

SAMPLE AND INSTITUTIONS

The first chapter of this thesis has set the ground for the presentation of a study on institutional children. The present study depicts the developmental status of a sample of Lebanese institutionalized children and an additional control group of government school students. Its subjects are between 6 and 17 years of age divided into 3 categories, matched in age, sex and religion.

171 subjects were drawn from four orphanages and three public schools to be examined on their academic records, intellectual achievement, sociability, and on their height and weight. These subjects formed three groups of 57 each. One group (Group "A") consists of the majority of available Lebanese foundlings, who were institutionalized shortly after birth. In the case of this group, the first 5 to 7 years of childhood were spent in a foundling home and during the later years the children were transferred to a bigger orphanage to which an elementary school is attached. Group "A" children were matched by two other groups. One of these two other groups is composed of dependent children from poor families (Group "B" a majority were orphans but a few were cases of poverty) institutionalized after spending their first 5 to 7 years of childhood with their family in which the mother, with or without the father, was present. Group "C" children, the control subjects, were randomly selected from government public schools which offer free

TABLE 1

FREQUENCY DISTRIBUTION OF SUBJECTS, ACCORDING TO AGE IN YEARS. SINCE THE MATCHING WAS DONE ON AN INDIVIDUAL BASIS THE BELOW DISTRIBUTION IS FOUND IN EACH OF THE THREE GROUPS "A", "B" AND "C".

<u>Age in Years</u>	<u>No. of Subjects</u>
6	5
7	2
8	6
9	9
10	3
11	4
12	7
13	6
14	6
15	5
16	3
17	1
Mean: 11.1	Total: 57

TABLE 2

FREQUENCY DISTRIBUTION OF SUBJECTS, ACCORDING TO RELIGION AND SEX. THE BELOW DISTRIBUTION IS FOUND IN EACH OF THE 3 TYPES OF GROUPS.

<u>Religion</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Christians	17	19	36
Moslems	6	15	21

education to lower class children who are living in a normal family setting. So group "A" has the most deprived Ss, group "B" the moderately deprived children and group "C" the controls.

As Table 1 indicates, 23% of the subjects range in age between 6 and 8 years, 40% are 8 to 13 years of age and 37% fall between the age range 13 to 17.

In each of the three groups there are 36 Christian Ss and 21 Moslems, 34 girls and 23 boys (see Table 2). The Christian social institutions in this study are Catholic and the Moslem ones are of the Sunni sect. A variety of the Christian and Moslem sects are represented in the dependent and control groups.

During their early childhood and before joining a big orphanage 57% of group "A" Ss had 5 years of placement in a foundling home, 38% had 6 years and 14% had 7 years. In the case of group "B" (institutionalized) Ss, 49% lived their first 5 years of childhood with their family, 36% stayed 6 years and 14%, corresponding to the foundlings, had 7 years of babyhood in a home. Most of group "C" children join the day schools at 7 years of age, though some started at 6 and a very few at age 8.

INSTITUTIONS

A. Orphanages and Public Schools.

The subjects in the sample of this study were selected from 4 orphanages and 3 government schools. Table 3 presents specific data on the distribution of subjects in the different orphanages and public schools. It should be noticed that from each orphanage there is the same number of subjects of "A" and "B" type. One will observe that ranges and

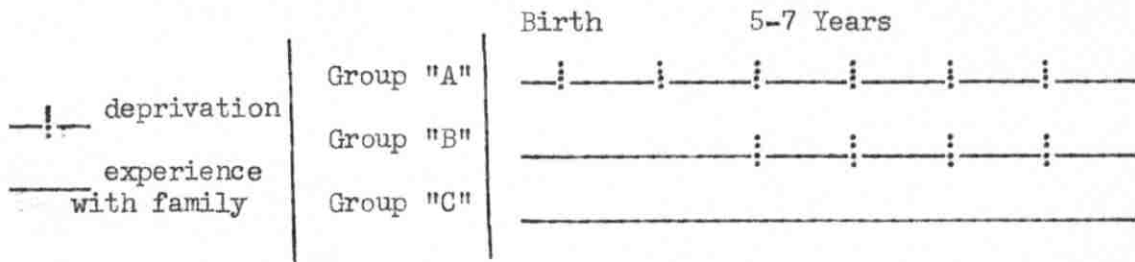


Figure 1. Type of subject and amount of deprivation from family. Group "A" Ss have no experience with family living, "B"'s have the first 5 to 7 years, "C"'s have been living at home since birth.

TABLE 3

CHARACTERISTICS OF SUBJECTS IN EACH OF THE SEVEN INSTITUTIONS, TYPE AND NUMBER OF Ss, AGE RANGE, MEAN AGE, SEX AND RELIGION ARE THE VARIABLES CONSIDERED FOR CLASSIFICATION

Institution	Type & No. of Ss	Age Range	Mean Age	Boys	Girls	Christian	Moslem
Mar Mansour	A12, B12	6-13	10.18	24	0	24	0
Zouc Mikhail	A19, B19	8-17	13.21	0	38	38	0
St. Joseph	A5 , B5	14-16	14.80	10	0	10	0
Moslem Orphanage	A21, B21	6-13	10.80	12	30	0	42
Ras Beirut Public School for Girls	C26	6-14	10.12	0	26	11	15
Ashrafie Public School for Girls	C8	10-17	14.62	0	8	8	0
Ras Beirut Public School for Boys	C23	6-16	11.04	23	0	17	6

means of ages vary from one institution to another. The shortest age range (14-16) is that of the St. Joseph Orphanage and the widest (6-16) is that of Ras Beirut Public School for Boys. The mean age of the smallest value belongs to the Moslem orphanage and the highest is also that of St. Joseph's Ss (14.8 years).

There is one coeducational institution, the Moslem orphanage. Starting the reading from the top of Table 3, one can see that the first institution is an orphanage for Christian boys below 12 years of age (24 Ss). The second is for the Christian girls (38 Ss). The third provides us with 10 teen age Christian boys. The Moslem orphanage supplied the study with 30 Moslem girls and 12 Moslem boys, the totality of Moslem Ss. Christian and Moslem girls for the control group were provided by two public schools. One gave 11 Christians and 15 Moslems and another presented only 8 females of the Christian faith. Finally, one public school for boys, shared in all group "C" male subjects, 11 Christians and 6 Moslems.

B. Foundling Homes.

The majority of foundlings in this study (all Christian foundlings) were reared in a social institution for "abandoned" children known as "The Creche." This foundling home has probably become familiar to many child psychologists all over the world through the often-cited work of Dennis and Najarian on "Development under environmental handicap."⁽¹³⁴⁾ It is also interesting to note that it is estimated that about 1/4 of the foundlings of this research had served as infants and pre-school age subjects in the above mentioned study (for details of the study refer to the first chapter, page 11). As the above said study was conducted in 1956, its infant Ss

(134) Dennis and Najarian, op.cit., No. 436 .

should be now about 8 to 9 years of age and its pre-school Ss should be about 13 to 14 years of age. The rest of our foundlings Ss, including the Moslem ones, are assumed to be from a similar background. They are reared by a number of care-takers who cannot provide enough mothering in a charity home which is more of a "shelter" than of an educational environment. The Moslem Ss of type "A" have been reared in a Moslem foundling home which is, to the writer's knowledge, equally psychologically depriving - if not even more, than the Creche. In fact the Creche seems to be a typical Lebanese social-service institution. It provides a secure physical atmosphere and a minimum of preparation and training for the deprived child who is badly in need of a loving and stimulating mother. The children are placed at the Creche either by their un-wed mothers who relinquish their guardianship rights immediately after the child is placed, or by someone simply leaving them secretly at the door steps of the institution. The typical child-care worker at the Creche does not seem to be trained enough to be able to handle the multiple needs of the children. Mothering seems to be quantitatively and qualitatively deficient in this foundling home. In describing the Creche, Dennis and Najarian state that: "the feeding, clothing, and housing of the children have the first claim upon the Creche's meager income. The most stringent economy must be exercised in regard to expenditures for personnel."⁽¹³⁵⁾ They later add in their summary the following conclusive statement:

(135) Ibid., p. 316.

Opportunity for developing infant skills through practice is very slight. In the early months the infants are swaddled. For many months the infant lies on his back, and is even fed in a supine position. He is not propped up, carried about, or provided with the means of practicing many activities.⁽¹³⁶⁾

(136) Ibid., p. 329.

CHAPTER THREE

TESTING PROGRAM

I. Instruments and Facilities.

In order to examine the subjects of this study on intelligence, academic standing, sociability and physique the following indices were used:

- A. Progressive Matrices test - Intelligence test.
- B. A sociometric technique (sociability among class mates)
- C. Academic school records.
- D. Height and weight scales.

A. The intelligence testing instrument.

After a process of deliberation and consultation it was decided that the Progressive Matrices test (1938) is likely to give relatively reliable data on the intellectual non-verbal group performance of institutional Lebanese children of school age. The Progressive Matrices test (P.M.) is a pencil-and-paper non verbal cross-cultural test that can be administered to a group of subjects, at a time, with a minimum of instructions. It can be easily and objectively scored. It is presented as 60 independent, but progressive, designs in booklet form. The subject is required to examine each design and see which part of it is missing, the answers being provided by 6 to 8 alternatives of which only one can fit the pattern of the design harmoniously.

In a comprehensive critical review of the literature on P.M. (1938) Burk categorized the five sets of this test (12 matrices in each) as follows:

Set A - Continuous patterns

Set B - Analogies between pairs of figures

Set C - Progressive alteration of patterns

Set D - Permutation of figures

Set E - Resolution of figures into constituent parts. (137)

According to Burk this test is, perhaps, the most widely used of British tests, e.g., taken by 3 million recruits in the last war. (138)

Professional opinion on the test, particularly among British psychologists, is highly favorable. (139) Spearman for example, thought of it as "perhaps the best of all non-verbal tests of g." and Vernon considered it "one of the purest tests of g available." (140)

Empirical findings on its validity would lead one to appreciate it. However, critical findings reveal that the P.M. is far from being a perfect assessing tool. The P.M. correlates reasonably well with the Terman Merrill and Wechsler tests. (141)

Its reliability in "careful studies with children range from .88 to .71." (142) Even better reliability scores are reported with normal adults

(137) Burk, R.H. Raven's progressive matrices: A review and critical evaluation. J. genet. Psychol., 1958, 93, 199.

(138) Ibid., 201.

(139) Ibid., 202.

(140) Ibid.

(141) Ibid., 205.

(142) Ibid., 217.

and late teen-agers.⁽¹⁴³⁾

In a conclusive statement Burk summarizes his evaluation on P.M. in a fairly objective judgment in the following statement: "It is not a substitute in any sense for the Binet or Wechsler tests, nor for any verbal or non-verbal group test of mental ability, but it is perhaps an almost equally useful supplement, and shows inter-correlations with such tests perhaps as high as they show with one another."⁽¹⁴⁴⁾

B. Facilities used in the sociometric testing.

The control subjects were not tested for sociability; sociometric testing was restricted to children of group "A" and "B". As it was mentioned earlier, the institutional Ss are matched with respect to institution in addition to the other three variables; age, sex and religion. Only about 50% of the matched pairs of these two groups, which are studied on sociability, share the classroom as an additional control factor. Nevertheless it was decided to compare between the popularity of the members of these pairs of subjects regardless of "who is in what group." The percentages of votes that a given subject receives as "best friend" and as "least interesting" were considered the indices of social appeal and unpopularity respectively.

The subjects were distributed in 35 classes which constitute about 3 quarters of the total number of classes of the 4 orphanages from which the institutional Ss have been selected. These 35 classes provided 1082 voters, distributed in different group sizes as follows:

(143) Ibid., 216.

(144) Ibid., 221-222.

<u>No. of children in class room</u>	<u>Frequency</u>
10 - 15	2
16 - 25	6
26 - 42 (mean 31)	27
Total	<u>35</u>

C. Facilities for examining Academic Achievement.

School records were consulted to determine the level of academic achievement. The grade level (the class) was taken as an index of the educational status of the children.

D. Height and Weight Scales.

The usual height and weight scales were used to measure the height and weight in units of centimeters and kilograms respectively.

II. Procedure.

A. Pre-testing procedure.

Intelligence assessment needed a preparatory stage of pre-testing, since to the knowledge of the writer, the P.M. has not yet been used with Arab school age children. Furthermore, the kind of sample (of deprived children) that this study has, added to the relative complexity of the process of group-intelligence test administration, demanded a pre-experimental phase for the avoidance of unpredictable inconveniences.

For this trial testing session the P.M. was given to 60 children between ages 6 and 10, 40 in 3 group settings and 20 individually. The group Ss were chosen from the Awzai orphanage (in the suburbs of Beirut) and the individual Ss were selected from St. Charles orphanage and Zahrat al Ihsan

school (both in Beirut). There was about an equal number of children for each age of the five-years age-range chosen for the pre-assessment phase. Results of group and individual testing indicated clearly that the P.M. (1938) is not sensitive enough for testing the intelligence of Lebanese children who are 6 to 8 years of age. It was very hard to communicate group-test instructions to such young children, and the individual performance was too impulsive to be trusted. The results with institutional as well as with family children were, in general, too low to be considered valid.

B. Testing and measurements procedure.

1. Intelligence testing.

The essentials of the procedure given by the "Guide to using the Progressive Matrices" were translated to colloquial Arabic and followed faithfully.⁽¹⁴⁵⁾ After the pre-testing experience it was felt necessary to exclude the 6-8 years old Ss, to enlarge the first matrix (Practice Matrix) and devise 3 additional practice matrices to improve the general achievement, insure maximum understanding of the instructions, and for the training, hopefully, with an optimum possibility for transfer to the performance on the test itself.

The subjects were seated in comfortable separate seats facing the administrator (the writer himself usually assisted by one or two supervisors) of the test. A blackboard was used for posting the enlarged matrix and drawing the 3 devised matrices. During a period of 15 to 25 minutes the subjects worked on the solution of the practice items with the guidance of

(145) Raven, J.C. Guide to using Progressive Matrices (1938),
London: H.K. Lewis & Co., 1954.

the test administrator. The 3 new devised matrices were supposed to represent (1 for each) the second, third and fourth sets of the P.M. (1938). All sorts of questions were answered and some discussion on the logic involved in the solution of the practice designs took place.

After the practice session the children were asked to listen carefully to the following set of instructions:

a. "This test has 60 problems similar to the ones we have just solved on the blackboard.

b. As you may have noticed during the practice session, you have more than one kind of problem; there are 5 sets, 12 matrices in each.

c. The problems in the beginning are easy, later they become harder, and if you pay attention to the easy ones you will find the later ones less difficult.

d. Work carefully and do not worry about time.

e. Try all problems if you can and remember that there is only one single right answer to each problem.

f. Mark the missing figure which fits the pattern with your pencil.

g. Try your best, as the best scorer will receive a prize."

The test was given to groups of Ss that ranged in size from 10 to 22 at a time. The same group procedure and accommodations were provided for absentees. Fifty minutes were given to each testing session. Each subject had a test form and a pencil with an eraser. No one was allowed to leave the room before the end of the session. Reviewing one's performance was encouraged by the administrator openly, particularly in regard to the 2nd and 3rd set (the medium in difficulty). Usually the names of the subjects were written

by the subject himself on the cover of the test booklet. Supervision included assistance for following instructions, but without giving help in solving the problems.

C. Procedure of the Sociometric test.

In order to examine the social acceptability of the foundlings and the orphans, a simple sociometric test was made in every classroom which contained any number of these children. As can be seen from Table 4, there were 35 classes, and the proportion of foundlings in classes containing foundlings was about the same as the proportion of orphans in classes containing orphans.

In each class, each child was asked two questions: "Who is your best friend?" and "Whom do you like least?" The voting was done in writing in all except the first and second grades (7 classes, with 256 pupils), where voting was done orally to the teacher. All children were encouraged to vote frankly and independently.

D. Height and weight measurement procedure.

Wearing light clothes and bare-footed, the Ss were examined on height and weight. Except in the case of the "Zouc children" all of the testing was done by the experimenter assisted by one of the school supervisors. The "Zouc" scores were taken from the school files which were filled about 2 months before the testing date. $1/2$ a kilogram was reduced from each weight score to compensate for the weight of the clothes.

TABLE 4

DISTRIBUTION OF THE INSTITUTIONAL SUBJECTS IN SCHOOL CLASSES
USED IN THE SOCIOMETRIC TEST

School	Class	No in Group A	No in Group B	Others	Total
Mar Mansour	1	2	1	27	30
	2	4	0	29	33
	3	3	3	26	32
	4	2	5	29	36
	5	1	2	24	27
	7	0	2	26	28
	Zouc	2	1	1	31
3(A)		1	0	38	39
3(B)		1	1	38	40
4(A)		1	2	33	36
4(B)		9	0	8	17
5(A)		0	1	31	32
5(B)		4	3	14	21
6(A)		0	2	22	24
6(B)		1	7	8	16
7(A)		0	1	27	28
7(B)	1	0	12	13	
Dar al-Aytam	1	6	5	27	38
	2(A)	3	1	35	39
	2(B)	3	3	37	43
	2(C)	2	2	38	42
	3(A)	1	0	32	33
	3(B)	1	1	33	35
	3(C)	0	1	32	33
	3(D)	2	0	31	33
	4(A)	1	0	31	32
	4(B)	0	1	34	35
	4(C)	1	2	32	35
	5	0	2	17	19
	6	0	1	32	33
	7	0	1	31	32
St. Joseph	4&5	3	1	26	30
	6	0	1	22	23
	7	1	2	26	29
	8	0	1	9	10

III. Scoring.

The scores were recorded as follows:

A. Intelligence scores: No. of correctly solved matrices; the maximum is 60, the actual No. of items.

B. Sociometric scores:

1. Popularity, percentage of votes of "best friend" among classmates.

2. Unpopularity, percentage of votes of "least interesting" among classmates.

C. Academic achievement: The kindergarten class was ranked "1" and the 6th elementary "7".

D. Height and weight: Direct reading in centimeters and kilograms, respectively.

IV. Analysis of scores.

Taking one variable and 2 groups at a time, the difference in scores between the members of the matched pairs of the Ss of the 3 groups studied were calculated and ranked. Rank "1" was given to the smallest difference among the pairs and the highest rank was given to the greatest difference. The pair which had the two scores tied was rejected; thus the highest rank value should be equal to the number of matched pairs that had a score difference in any direction. The Wilcoxon Matched Pairs Signed Rank Test was applied (the equivalent of the "t" test for comparing the means of related samples) to evaluate the significance of the results. (146) Mean

(146) Siegel, S. Nonparametric statistics. New York: McGraw Hill, 1956, pp. 75-83.

values of the scores of groups and subgroups were also calculated to check for the consistency of the empirical trends inferred through the statistical test of significance.

CHAPTER FOUR

RESULTS

In this chapter the results of each of the 3 types of subjects will be compared; sub-groups scores will also be considered so that it becomes later feasible to make generalizations in connection with the hypothesized relations between family deprivation and personality development. In the Appendix Tables A, B and C contain the individual scores on all the variables tested. Each variable will be considered in this chapter independently.

I. Results on academic achievement.

When the school records were consulted it was found that the institutionalized children of both kinds were seriously retarded scholastically. The institutional Ss who have a family background are less retarded academically than the foundlings. However, they are even significantly lower than the poor class children who live with their families and get their education at the public government schools. Table 5 shows the degree of significance of the difference in scores between two groups at a time indicating the direction of the disparity. This table reads that group "B" Ss are significantly higher than group "A" Ss and lower than group "C" children in grade-level scores. Table 6 gives the mean scores. Keeping in mind that the mean age and years of schooling for the 3 groups is practically the same (mean age is 11.1 years), it is interesting to find that group "A" mean score on academic standing is 3.21 grades, "B"'s 4.23, and "C"'s 5.26.

TABLE 5

DIRECTION AND SIGNIFICANCE LEVEL (PROBABILITY OF ERROR) OF THE DIFFERENCE IN SCORES AMONG THE THREE GROUPS, TAKEN TWO AT A TIME. THE COMPARISON WAS MADE WITH THE WILCOXON MATCHED PAIRS SIGNED-RANK TEST ON ACHIEVEMENT, SOCIABILITY AND PHYSIQUE.

Achievement		Sociability		Physique	
Academic Achievement	Intellectual Achievement	Best Friends	Least Interesting	Height	Weight
B>A.0005	B>A.03	A>B 2.62	A>B 13.57	B>A.002	B>A 1.66
C>B.002	C>B.28	-	-	C>B.005	C>B .57

TABLE 6

MEAN SCORES OF THE THREE GROUPS, "A", "B" AND "C" ON ACADEMIC ACHIEVEMENT, INTELLIGENCE, SOCIABILITY (BEST FRIEND AND LEAST INTERESTING), HEIGHT AND WEIGHT. SCORES OF ACADEMIC ACHIEVEMENT ARE IN GRADE-LEVEL; OF INTELLIGENCE, IN NUMBER OF CORRECT SOLUTIONS; OF SOCIABILITY, IN PER CENTAGE VOTES FROM CLASSMATES; OF HEIGHT, IN CENTIMETERS AND OF WEIGHT IN KILOGRAMS. ALSO ALSO MEAN AGE AND NUMBER OF Ss (N) ARE PRESENTED CORRESPONDING TO EACH VARIABLE TESTED.

	Grade Level	Intelligence	Best Friend	Least Interesting	Height	Weight
Group A	3.21	15.5	3.8%	4.7%	129.82	31.75
Group B	4.23	23.5	2.2%	3.8%	134.75	33.7
Group C	5.26	29.61	-	-	139.02	37.16
Mean Age	11.1	12.29	11	11	11	11
N	57	44	55	55	56	56

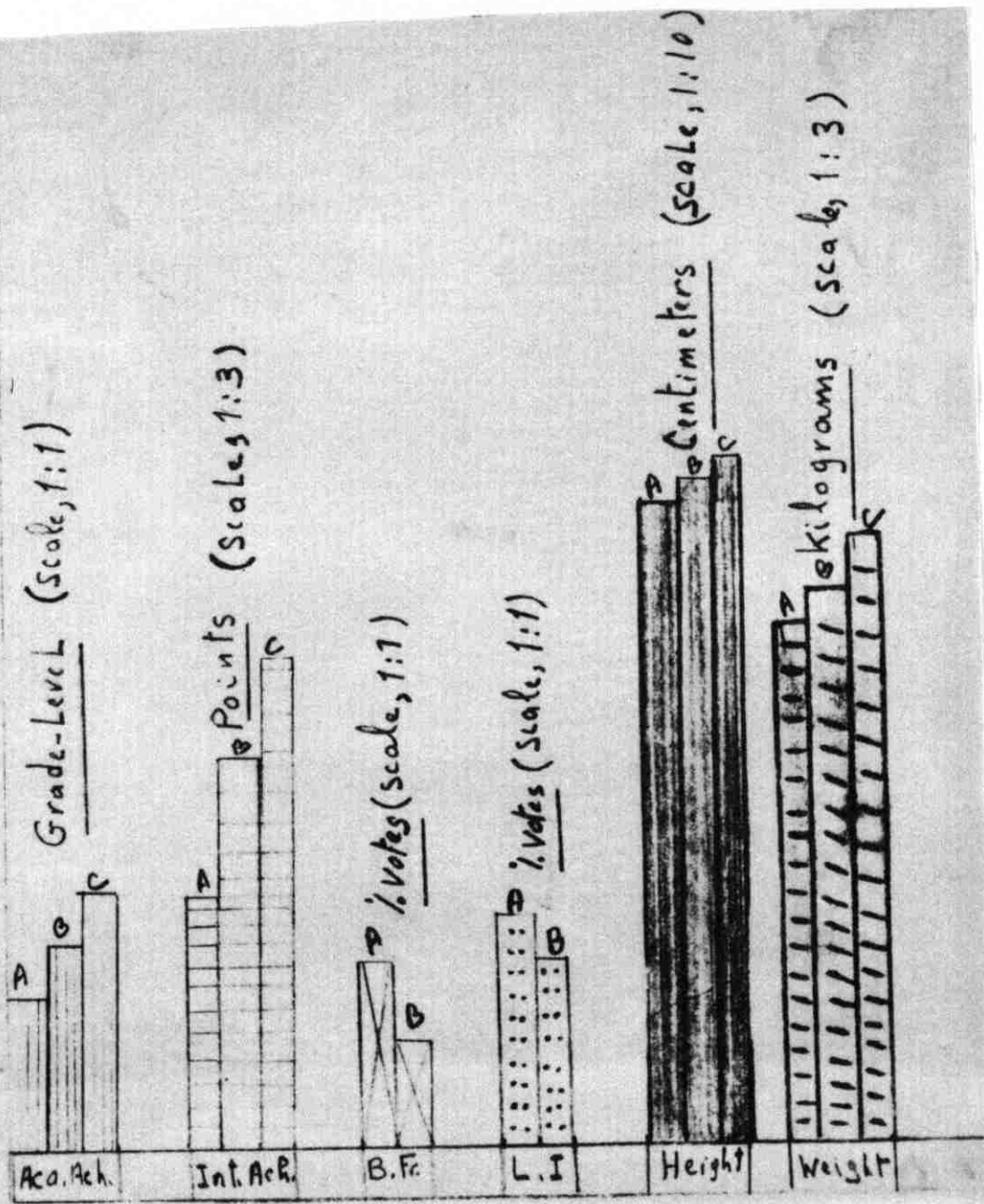


Figure 2. Mean scores of the 3 groups, "A", "B" and "C", on academic achievement (Ac. Ach.), intellectual achievement (Int. Ach.), best friends (B. Fr.) and least interesting (L.I.), Height and Weight. Scores on Ac. Ach. are in grade-level, on Int. Ach. in points (reduced scale), on B. Fr. and L.I. in percent votes, on Height in centimeters (reduced scale) and on Weight in kilograms (reduced scale).

TABLE 7

MEAN SCORES OF THE SUB-GROUPS: THE CHRISTIAN BOYS, THE CHRISTIAN GIRLS AND THE MOSLEM BOYS AND GIRLS OF EACH OF THE THREE CATEGORIES "A", "B", AND "C", ON ALL OF THE VARIABLES STUDIED. THE MEAN AGE OF EACH SUB-GROUP IS PRESENTED (BETWEEN BRACKETS) BELOW THE CORRESPONDING MEAN SCORE.

Sub-Groups	Grade Level	Intelligence	Best Friend	Least Interesting	Height	Weight
Christian Boys A	3.35 (11.53)	18.6 (11.88)	3.26 (11.25)	4.44 (11.25)	130.6 (11.73)	31.53 (11.73)
Boys B	4.94 (11.53)	28.5 (11.88)	2.3 (11.25)	2.77 (11.25)	138 (11.73)	37 (11.73)
Boys C	5.59 (11.53)	28 (11.88)	- -	- -	143.7 (11.73)	42 (11.73)
Girls A	4.2 (13.21)	14.6 (13.33)	3.77 (13.16)	7.13 (13.16)	142.6 (13.16)	42.16 (13.16)
Girls B	5.15 (13.21)	23.2 (13.33)	2.73 (13.16)	5.03 (13.16)	143.72 (13.16)	40.19 (13.16)
Girls C	6.63 (13.21)	36.4 (13.33)	- -	- -	149.2 (13.16)	43.1 (13.16)
Moslem Subjects A	2.19 (8.86)	12.2 (10.8)	4.74 (8.86)	2.86 (8.86)	118.33 (8.86)	24 (8.86)
Subjects B	2.81 (8.86)	18.1 (10.8)	1.77 (8.86)	3.72 (8.86)	124.67 (8.86)	26.93 (8.86)
Subjects C	2.76 (8.86)	20 (10.8)	- -	- -	126.93 (8.86)	28.60 (8.86)

TABLE 8

OF ALL CATEGORIES THE Ss ARE GROUPED INTO 3 NEW DIVISIONS ACCORDING TO SEX AND RELIGION - THE CHRISTIAN BOYS (Y), THE CHRISTIAN GIRLS (X), AND THE MOSLEM BOYS AND GIRLS (Z). MEAN SCORES OF X, Y AND Z GROUPS ARE PRESENTED. THE MEAN SCORE OF EACH GROUP IS PRESENTED ABOVE THE CORRESPONDING MEAN AGE (IN YEARS). THE VARIABLES CONSIDERED IN THIS TABLE ARE ACADEMIC AND INTELLECTUAL ACHIEVEMENT AND SOCIABILITY. IN THE LOWER PART OF THE TABLE THE MEAN AGE DIFFERENCE AND THE MEAN SCORE DIFFERENCE BETWEEN X & Y, AND Y & Z ARE REPRESENTED NEXT TO EACH OTHER.

Group	Ac. Ach.	Int. Ach.	Best Friends	Least Interesting
(Y) Christian Boys	4.63 (11.53)	25.4 (11.88)	2.78 (11.25)	3.65 (11.25)
(X) Christian Girls	5.33 (13.21)	24.7 (13.33)	3.25 (13.16)	6.08 (13.16)
(Z) Moslem Children	2.92 (8.86)	16.7 (10.8)	3.25 (8.86)	3.29 (8.86)
X > Y	.70 (1.68)	-.7 (1.45)	+.47 (1.91)	3.03 (1.91)
Y > Z	1.71 (2.67)	8.7 (1.08)	-.47 (2.39)	-.62 (2.39)

Incidentally, even group "C" children are probably one grade below the norm of the private school children in Beirut. There is about 1 grade of difference between "A" and "B" and between "B" and "C" in the expected direction. Table 7 confirms the above said relation as one compares the mean scores of the 9 sub-groups; the Christian boys, the Christian girls and the Moslem Ss of "A", "B" and "C". It is seen that in each of these 3 matched sets of sub-groups the founding average score in academic achievement is lower than that of the Orphans, the latter's however is lower than that of the government children.

Table 8 presents means of scores of the 3 types of subjects combined as the comparison in this case, is made among the Christian boys, the Christian girls and the Moslem subjects. The Christian female (the eldest, mean 13.21) Ss are older than the Christian males (mean 11.53 years) by an average of 1.68 years yet they are advanced over them only by .70 of a grade. Similarly the Moslem subjects (the youngest, mean 8.86 years) are younger than the Christians by an average of 2.67 years and yet they are lower only by 1.71 grades. One can notice that the age mean difference is larger than the achievement difference in both of the cases mentioned above; moreover it should be observed also that the tendency for this disparity between the age and achievement gaps seems to increase with age. This tendency appears consistently in Table 7, (particularly between the cases of the 2 Christian institutionalized Ss) when deprivation, sex and religion are taken as the criteria for classification in the sub-grouping.

II. Results of intellectual achievement.

The test of significance rejected the null hypothesis, which assumed that deprivation from the family has a chance relation with the development

of intelligence. The institutionalized child on the whole scored considerably lower than the control child; the more deprived suffering the most. Mean scores of the 3 groups are 15.5 for "A", 23.5 for "B" and 29.61 for "C".

Sub-group comparison (in Table 3) reveals that the control Ss are not more intelligent than the institutional subjects of group "B" except in the case of the Christian females when the means are considered. In fact it seems that this severe retardation of group B Christian girls has made the main contribution in determining the general (significant) result of the statistical test on all "B" vs "C" in general.

The Zouc orphanage Christian girls are even less developed intellectually than the Brummana St. Joseph Ss who are younger, of the same faith and of the opposite sex. As it was expected the Moslem children in the sample had the lowest mean scores since they were the youngest, as a group. When all the Christian boys scores are combined, one will notice that they are roughly equal to the combination of all the Christian girls in spite of the difference of 1.45 years of mean age between the two groups and the fact that group "C" Ss are included.

III. Results of the Sociometric Test: (Group A and B only).

A. Best Friends.

Interestingly enough the findings have shown that the foundlings tend to be more often selected as "best friends" than the orphans (with a family background). The significance of this tendency is serious enough to reject the null assumption at 2.62% level. The average number of children in a single classroom is around 31. Whereas the average number of positive votes per subject in Group "A" is 3.8%, that of group "B" is 2.2% only.

Through simple arithmetic the fact appears that the foundling has an average of 1.2 friends who think of him as the best friend among classmates. In the case of group "B" there is an average of less than one (.68) admirer for each orphan. This phenomenon is observed among the sub-groups as well; religion, sex and kind of institution do not seem to intervene in this discovered tendency.

B. Rejections.

Surprisingly there is also a slight tendency (not significant statistically) for foundlings to be more often rejected than orphans. If this relation is not a chance one (and there are theoretical reasons for believing that it is not) there will be a genuine explanation for taking it to be in harmony with the fact that the foundlings are also more often chosen as "best friends". It is likely that Group "A" subjects have tended to choose one another whereas those of group "B" and the rest of the classmates did not. This is by no means contradictory to the fact that classmates, in general, rejected more of the foundlings than they did the orphans. The mean score of children rejecting a classmate for group "A" is 4.4% and for group "B" is 3.8% (i.e. 1.46 votes for "A" S and 1.18 votes for "B" S - out of 31). It should be mentioned that this general tendency is reversed among the Moslem Ss; Moslem group "B" Ss are more often rejected than those of group "A", but not seriously so.

Furthermore, rejection mean scores appear to be higher than "best friend" scores in both groups. The superiority of rejection scores over the scores of friendships is only significant in the case of the Zouc girls of both groups (Table 7).

Finally it is likely that age is a factor to be considered as intervening in the "negative" type of the sociometric choices. With an

increase in the mean age among the 3 sub-groups (in Table 5) there is an increase in the degree of unpopularity. This increase in unpopularity is hardly worth mentioning between the 2 younger sub-groups, but the case is substantial when these 2 younger groups are compared to the eldest, the Zouc girls.

IV. Height and Weight Measurements.

Data on height and weight (H-W) are considered simultaneously because they are related, particularly in childhood. As it can be seen in Table 5, the results show that "A < B < C" in height as well as in weight. The difference is big enough to reject the null hypothesis, more so in the case of height. It should not be surprising that the mean scores of weight measurements of the 2 institutional groups are not very different from one another. The Wilcoxon test is very sensitive to the direction of the difference between the matched members of two related samples. In this case there are 45 Ss of group A who are lighter than their corresponding partners in group B. However, sub-group analysis indicates that among the Zouc girls weight mean scores of both categories are practically equal to each other and to the controls, and interestingly enough, they are in height, substantially lower than the controls but very close to one another.

CHAPTER FIVE

ANALYSIS AND INTERPRETATION OF THE DATA

An attempt at relating the environmental and other psychological factors with the results reported in the previous chapter will be the content of this chapter. Roughly the same order that has been followed in the presentation of data in the previous chapter will be used in the present one. The discussion will consider at first academic achievement, secondly, intelligence, thirdly sociability and finally height and weight.

I. Academic Achievement.

It has been found that the child of the institution is academically seriously below par. The ordinary Beirut school child at 11 is probably in his 5th elementary grade (i.e. the first 6 successful years of schooling). The foundlings average score in schooling (with mean age 11.1) deviates about 3 years from the above norm. Similarly the mean of the orphans is about 2 years retarded and that of the government school is about 1 grade below the privileged child of the capital. The fact that the orphan is on the whole less retarded in school is probably related to at least two basic factors. First, the 5 to 7 years family background has made the orphan a better adjusted child when compared with the foundlings. Second, he has had the chance to develop his intellectual potentialities through the mothering and what goes with it, e.g., training and stimulation at home. The level of adjustment and the intellectual capacity which tend to be superior in orphans to foundlings account for the better progress which the former type of child tends to make in comparison to the latter. By the

same token, the orphan is less likely to achieve as well as the control subject.

Both groups, nevertheless, are relatively under-achievers when compared with non-institutionalized children. This is explained by the fact that the institutional environment in Lebanon at the present time is severely depriving. Through an informal unfinished study conducted last year by the office of Social Development some of the major characteristics of institutional care in 10 Lebanese orphanages were isolated qualitatively and quantitatively.⁽¹⁴⁷⁾ It was found that the standard of child care at these 10 representative institutions is remarkably low in terms of the following indices:

1. Specialized personnel in administration, supervision and teaching is practically nonexistent.
2. The number of child care workers compared to the number of deprived children in a given institution is considerably low.
3. Adequate educational facilities and equipments, including classroom conditions are more often than not unfavourable.
4. The curriculum and the extra-curricular program is not well tailored according to the needs of the children. There is little concern with creative and recreational activities. There is not enough contact with the environment outside the institution and with society in general.
5. The procedure of placement in institution is often left to chance factors or to practical considerations which are very likely to be unsuitable to the child's needs. In a typical classroom, for example, there is an age range of about 4 years. The children's homogeneity in terms of needs, abilities and backgrounds is too low to be manageable by any one program of institutional living and education.

(147) Office of Social Development, Lebanese Social Institutions. Beirut: Unfinished, 1963.

The literature on institutional children does not seem to contain much of material on the academic achievement of deprived children. Bowlby, for example, mentions incidentally the fact that school work of maternally deprived children is "more often than not seriously impaired."⁽¹⁴⁸⁾ Feinberg, assessing the academic performance of a sample of orphans through the Stanford Achievement Test, discovered that institutional children are low achievers in this aspect.⁽¹⁴⁹⁾ On the other hand Gardner and Hawkes did not find considerable impairment in scholastic work with a group of subjects who lived apart from their families for a short period in early childhood.⁽¹⁵⁰⁾ Gardner and Hawkes' work and similar studies should make us aware of the fact that the duration of deprivation is directly related to the severity of effects on the development of the capacities of the parentless child.

The literature has also made it clear to us that the severity of the environment deprivation in the institution determines the seriousness of the damage on the parentless child. The above said fact may bring us back to the details of the findings on academic achievement. It has been mentioned in the previous chapter that the Brumana St. Joseph group are more advanced in achievement scores than the "Zouc" girls when the difference in age between the two groups is considered. There seems to be two interacting causes which explain the academic superiority of Brumana St. Joseph orphanage Ss to that of the Zouc. The first is the simple fact that the nuns supervising the Zouc girls encourage the institutional child to indulge in vocational and other manual work at the expense of the academic duties. There appears to

(148) Bowlby, op.cit., p. 31.

(149) Feinberg, op.cit., 217-229.

(150) Gardner and Hawke, op.cit., 225-239.

be little consideration of the value of developing the mental potentialities of the institutional child through serious training and appropriate guidance. Their performance on the P.M. show that they are even inferior in intelligence to the Christian institutionalized boys who are younger than them.

It should be mentioned that there is a disproportionate difference in achievement among the three sub-groups in favour of the younger of any two of them. The second factor to be mentioned explains this general tendency. It lies in the fact that the deprivation effect is cumulative. The older the child grows the longer the duration of deprivation and the stronger the damage will be. Thus the Zouc girls, being the eldest group, have had a lot of impairment cumulating along the numerous years of deprivation. It seems that the cumulative curve of development of the academic achievement in the institution is asymptotic in nature; it almost reaches its maximum during the early teens.

II. Intellectual achievement.

It has been established in this study that the typical Lebanese foundling is less intelligent than the orphan who was institutionalized at about age 6. The orphans, however, tend to be less intelligent than the control children, but not considerably so, except in the case of the Christian Zouc orphans.

Since the performance of the other 2 sub-groups is only about the 20th percentile of the English norms one is likely to attribute retardation rather than normality to both of them. Thus the government school children (except for Christian females) were as impaired intellectually as were the orphans. It nevertheless should be kept in mind that the superiority of the low class normal child to the orphan in academic achievement has been con-

sistently shown. Naturally the family child is likely to get more motivation to study than the family deprived one.

Christian girls of the family-group appear to be normal in all of the variables on which they were tested. The writer has an impression that the 2 government schools from which the Christian "C" females were selected are moderately advanced as far as the personnel and facilities for teaching are concerned. The directors of these two institutions are seriously interested (and they appear to be successful) in providing a stimulating intellectual academic environment in their schools.

The severe intellectual mal development of the Zouc orphanage Ss has been discussed in the previous section. The severity of mal development was related to the severity of deprivation in the Zouc orphanage.

The general picture of the results on intellectual achievement confirms the hypothesis that family deprivation, particularly in early childhood, is severely detrimental to intelligence in middle and late childhood. This conclusion is in perfect harmony with Bowlby's, Yarrow's and Glasser and Eisenberg's views.⁽¹⁵¹⁾⁽¹⁵²⁾⁽¹⁵³⁾ It is interesting to find that Dennis has very recently revealed more or less the same picture of the intellectual mal development of the institutionalized children. At about the same time of the collection of data of this study Dennis was testing the Zouc and Brumanna orphanage children.⁽¹⁵⁴⁾ Using the Porteus and the

(151) Bowlby, op.cit., pp. 30-36.

(152) Yarrow, op.cit., 459-490.

(153) Glasser and Eisenberg, op.cit., 625-640.

(154) Date of testing: February and March of 1964.

Goodenough test he found that the typical foundling is less intelligent than the average orphan, and the latter was also inferior to the extern family child who studies in the orphanage as a day student. Supporting this study, Dennis discovered that the Brumana children achieved better than those of the Zouc in intellectual achievement.

These two studies make a strong case for the family deprivation theorist. Two experimenters, working independently, testing the intelligence of, more or less, the same group of Ss and using different techniques at about the same time, came out with one single conclusion:

Family deprivation during the first 5 to 7 years of childhood is severely harmful to the development of intelligence; deprivation experienced in institution during elementary school is less serious but it is detrimental to a significant degree. Also, even the normal lower class family child tends to be less developed intellectually and academically when compared to more socially privileged children.

III. Sociometry.

Findings revealed that the foundlings got higher scores on both extremes of the social acceptability scale. It seems likely that different factors associated with foundlings may account for the different (apparently contradictory) results on the sociometric test. In some cases the status of a foundling won him admirers and in others it brought rejections.

A. "Best Friend".

Results indicated that the foundlings tend to be more often selected as "best friend" among classmates than the orphans. It should be kept in mind that the members of the 3 groups of foundlings in this sample have been living together since the very early childhood. They have had enough opportunity

for establishing a strong we-feeling among themselves. Anna Freud cites clinical evidence on this phenomenon when she reported on a group of institutionalized nursery children. She says "under ordinary conditions friendships of long duration are believed to be very rare among young children... Matters are different under residential conditions. We observe many instances of friendship among infants which last days, weeks, or even months."⁽¹⁵⁵⁾ This apparent strong solidarity feeling among the foundlings is probably reinforced by a common feeling of unity in type of background and the stereotypy in habits which they acquire under a routine system of child rearing practices. Moreover, unlike the orphans, the foundlings have practically no relatives outside the institution who can act as objects of identification or as parent figures. Findings no stable source of security among elders the foundling tends to turn to his close companions for mutual emotional support since infancy. Thus it is natural for the foundlings to tend to choose each other as "best friends" more often than the orphans do. This tendency among foundlings seems to explain partially their superiority over the orphans in getting higher scores on "best friendships".

It should also be noted that, because foundlings were retarded in their intellectual and academic development, they were likely to be older than their classmates. There may be a possibility of some children being chosen because they are older, stronger and more developed physically.

Finally, the foundling being likely to be severely hungry for affection may make a special effort to win admirers from his companions in class.

B. "Least interesting".

It has also been found that the foundlings of this sample are more frequently rejected than orphans. It is assumed that a part of the

(155) Freud and Burlingham, op.cit., p. 48.

non-foundlings are prejudiced against the (parentless) foundling.

Secondly, because the foundlings are the more retarded group in academic and intellectual achievement, some children found them "least interesting". When one consults any comprehensive review of the effects of family deprivation, such as those of Bowlby and Ainsworth, he finds frequent reference to the serious consequences of deprivation for the social behavior of the deprived child, and for his personality in general. His capacity for interpersonal relations in particular is supposed to be seriously damaged.⁽¹⁵⁶⁾⁽¹⁵⁷⁾ The results on social rejections fit the general trend established in the literature.

IV. Height and weight.

The foundlings are generally inferior to the orphans in height and weight, thus confirming the damaging effects of their early deprivation, which may have included deprivation in diet, exercise, etc., as well as deprivation in stimulation and affection.

Analysis of the sub-groups reveals one interesting datum. The foundlings from the Zouc are tall and heavy as the orphans with whom they were compared, and even as heavy as the controls. Somehow these girls have by their teens caught up with other children, in spite of their poor nutritional status when in the Creche.⁽¹⁵⁸⁾ It is difficult to understand how this could have happened for Creche girls and not Creche boys, unless the diet at the Zouc, or the large amount of manual work done there, some-

(156) Bowlby, op.cit.

(157) Ainsworth, op.cit., pp. 97-165.

(158) Milli, op.cit.

how compensates for earlier deficiency.

Finally, the case of the normality of the Zouc foundling girls in physique enables us to reject the argument which relates mal development in the mental processes to biological causes. In other words the Zouc case presents an additional control variable (the physical variable) which could have been otherwise suspected as a possible intervening factor between the environmental deprivation and psycho-social mal development.

CHAPTER SIX

SUMMARY AND CONCLUSIONS

This thesis has dealt with the development of institutional children in 4 Lebanese orphanages. The first chapter focussed on the literature of family deprivation, in particular maternal deprivation. The review pointed out clearly that maternal deprivation experienced in early childhood for a few years is likely to bring serious damage to the mental and social processes in personality development.

With the review of related research as a background the writer presented his study which examined 3 groups of children: foundlings placed in a foundling home shortly after birth, orphans separated from home at about age 6, and controls from 3 government schools who were living in intact families. The 3 groups were matched individually on age, sex and religion. All Ss started schooling at age 6, 7 or 8. The sample contained girls and boys, Christians and Moslems ranging in age from 6 to 17 years.

The orphanages (3 Christians and 1 Moslem) which house these children were described as lacking in conditions which stimulate and reinforce healthy development. They are, in short, understaffed, practically without specialized personnel, unequipped, with a traditional inappropriate program of living and learning, and finally, sheltering a population of children too heterogeneous in nature to be handled by a single program of education and socialization.

The children were examined on intelligence through the progressive matrices (a cross cultural non-verbal test), on academic achievement through

school grade-level records, on sociability with a sociometric technique, and on height and weight.

The family deprived children proved to be seriously underdeveloped intellectually and academically, with the more deprived group suffering the most.

Foundlings, the more deprived group, are in general, severely retarded in academic and intellectual achievement. The typical foundling is about 2 grades below the poor class normal child and 1 year below the average orphan. These "abandoned" children also tend to be significantly less intelligent than the orphans and the latter are more often than not inferior to the public school child. However, the control Ss also had a relatively low intellectual performance, with the exception of the Christian girls, who receive their academic training in a moderately advanced school in Beirut.

The inferiority of the institutional child to the lower class family child was related to the environmental deficiencies typical of social institutions in Lebanon. The relative superiority of the average orphan to the typical foundling is explained by the fact that the latter (unlike the former) has been deprived since shortly after birth.

The fact that the orphanage child separated from home at about age 6 is significantly underdeveloped in more than one basic aspect adds strength to the behavioristic argument on the nature of personality development. The results of this study do not support the (Freudian thesis) that claims that above the 5th year of childhood there is little that can be done to change the basic course of development. (159)

Results of the sociometric technique revealed that the foundlings were more often chosen as best friends than were the orphans, and also more

(159) Hall, op.cit., pp. 72-115.

often chosen as uninteresting. The latter finding would fit with previous studies of deprivation, but the fact that foundlings are not inferior in number of choices as "best friend" is a new finding. It is not possible from these data to give a full explanation for this striking result, but the problem would seem to merit further investigation to see whether the explanation lay in the fact that foundlings tend to be older than their classmates, have a strong "in-group" feeling, and are affectionately hungry, or in some other factor.

Height and weight results indicate that the institutional child was more often than not underdeveloped in physique. However, the orphan was less impaired in this respect. The findings on the physical measurements may be a result of any number of factors: e.g., nutrition, motivation and psychosomatic processes. It is interesting to note, however, that there is one institutional group of the more deprived category which was very much impaired in mental and academic capacities, and was nevertheless, equal to the controls in height and weight. From this it appears that deprivation of an intellectual and physiological type are not necessarily correlated. Moreover, psychological tests indicated poverty of stimulation and lack of opportunity for mental development, even when the environment was rich in physical facilities.

It is believed that this thesis has presented a fair descriptive case of the developmental status of the typical institutional child in Lebanon. There is hope that the policy makers of child care services in this country will consider this thesis as one possible illuminating source evaluating the role of the existing Lebanese social institution in the life of the dependent child.

APPENDIX

TABLE A

INDIVIDUAL SCORES OF THE CHRISTIAN BOYS IN THE THREE GROUPS ON ALL THE VARIABLES TESTED

Number of Subjects	Age of S	Grade Level			Intelligence			Sociability			Height			Weight			
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	
		% Time Chosen as Best Fr.			% Time Chosen as L.I. Fr.			in Centimeters			in Kilograms						
1	6	1	1	2	-	-	-	3.4	6.7	6.8	3.35	98.5	106.5	-	16.5	20	-
2	9	3	3	4	39	22	21	3.5	0	7	3.5	123.0	125.0	126.5	23.5	26.5	27
3	9	2	3	4	18	17	30	2.9	0	2.9	0	119.5	119.0	130.5	24.0	23.0	35.5
4	9	1	5	4	3	15	27	0	3.8	10	0	114	128.5	137	18.5	27.5	32.5
5	9	3	4	4	17	26	12	0	0	6.9	0	132	126	127	31.5	29.5	30
6	10	2	4	6	7	39	29	5.8	5.6	0	2.8	113	138	136	18	34	30
7	10	2	4	5	15	16	25	2.9	2.8	0	2.8	133	136.5	133.5	28	34	25
8	11	2	5	5	3	31	31	2.9	3.8	2.9	0	121	132	138.5	24.5	26.5	34.5
9	12	4	7	5	17	33	16	0	0	2.8	0	134	142	149	29	36	34.5
10	12	5	4	8	26	30	41	14.9	2.8	16.9	19.6	128.5	132	144	29	31	32.5
11	12	3	4	2	36	12	13	6.9	0	0	0	134	144.5	128	31.5	39.5	29.5
12	13	4	7	6	28	45	29	5.6	0	2.8	0	154	140	147	41.5	36	40.5
13	14	5	6	7	24	47	34	3.4	4.4	6.8	8.7	139	157	-	38.5	47.5	-
14	14	5	7	7	17	27	21	0	0	0	0	143	147	157	37	42.5	48.5
15	15	4	5	10	8	8	43	0	3.5	0	3.5	157	155.5	174.5	51.5	49.5	57
16	15	4	7	8	7	36	41	0	3.5	24.2	0	101	156	168	46	51.5	59.5
17	16	7	8	8	33	33	35	-	0	-	40.1	152	150	162	39.5	39	54

Key: Column A has the foundling scores.

Column B has the orphans scores.

Column C has the public-school children scores.

- i.e. not tested.

TABLE B

INDIVIDUAL SCORES OF THE CHRISTIAN GIRLS IN THE THREE GROUPS ON ALL THE VARIABLES TESTED

Number of Subjects	Age of S	Grade Level			Intelligence			Sociability		Height			Weight				
		A	B	C	A	B	C	A	B	A	B	C	A	B	C		
		% Time Chosen as Best Fr.			% Time Chosen as L.I. Fr.			in Centimeters			in Kilograms						
1	8	2	2	3	-	-	-	3.1	0	12.4	0	110	118	114.5	22	24	19.5
2	10	3	3	6	18	6	43	0	0	2.6	0	128	136	143	28	36	33.5
3	11	4	4	5	6	11	17	11.8	0	0	2.8	125	135	133	33	35	29.5
4	11	3	4	5	12	17	34	5.1	2.8	15.3	2.8	136	127	130.5	30	29	26.5
5	12	4	6	5	13	32	22	0	4.1	11.8	4.1	135	141	149	35	35.5	38.5
6	12	4	5	7	13	15	33	0	0	5.6	3.1	145	129	149.5	36	27	36.5
7	13	4	5	7	11	12	31	11.8	4.8	0	0	136	146	148.5	35	40	52.5
8	13	5	7	6	8	38	39	0	0	28.5	7.2	144	143	156	34	40	44.5
9	13	4	6	5	14	19	44	5.9	4.1	5.9	0	146	143	153	45	36	49.5
10	13	4	6	6	11	32	17	11.8	0	0	0	144	144	155	52	36	42
11	14	3	6	7	9	33	49	5.9	0	11.8	31.2	152	150	143	49	41	45.5
12	14	4	4	7	9	19	44	-	-	-	-	130	-	143.5	32	-	35.5
13	14	4	6	8	36	21	39	0	0	0	0	150	144	161.5	45	43	52
14	14	6	5	8	12	31	51	0	9.6	0	0	151	155	153	50	40	51.5
15	15	5	6	8	13	30	38	0	0	19.1	18.8	154	154	161	52	49	52.5
16	15	5	5	8	25	14	32	4.8	4.8	0	14.3	154	155	162	53	54	43.5
17	16	5	6	8	21	23	37	0	12.6	0	6.3	154	160	159	53	57	56.5
18	16	4	6	8	9	32	45	0	0	0	0	151	160	166	47	60	61.5
19	17	7	6	9	43	33	39	7.7	6.3	15.4	10	152	147	148	50	41	40

Key: Column A has the foundling scores.

Column B has the Orphans scores.

Column C has the public-school children scores.

- i.e. not tested.

TABLE C

INDIVIDUAL SCORES OF THE MOSLEM SUBJECTS ON ALL THE VARIABLES TESTED

Number of Subject	Age of S	Grade Level			Intelligence			Sociability			Height in Centimeters			Weight in Kilograms			
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	
		% Time Chosen as Best Fr.			% Time Chosen as L.I. Fr.												
1	6	1	1	3	-	-	-	0	2.8	0	0	92	107	113	12.5	19	18.5
2	7	1	1	2	-	-	-	10.6	0	5.3	0	101.5	104.5	119	18.5	15.5	22.5
3	9	2	5	3	15	22	9	5.2	6.1	7.7	3	120	144.5	127	20	37	24.5
4	9	2	3	2	6	9	4	2.6	0	5.2	3.3	120	128	128	22	28.5	27
5	12	3	5	5	15	27	17	15.2	5.8	3	0	139.5	145	140.5	35	43	34
6	15	4	7	8	37	30	47	0	0	0	0	163	167	160	58	59.5	53.5
7	6	1	1	2	-	-	-	2.8	2.8	0	8.4	98	104	115	17.5	16	21.5
8	6	1	1	2	-	-	-	0	-	0	-	101	107	104	17	19	17.5
9	6	1	1	2	-	-	-	10.9	0	2.7	0	101.5	102	119	15	11	22.5
10	7	1	2	2	-	-	-	10.9	2.4	16.3	0	106.5	121	113	19	24	17.5
11	8	2	1	3	-	-	-	0	0	0	0	116	112.5	120	22.5	19.5	26
12	8	2	3	3	-	-	-	0	10.1	0	2.9	108	112.5	124	19	23	24
13	8	2	2	4	-	-	-	0	10.1	5.2	0	107	124	122.5	22	24	24
14	8	2	2	4	-	-	-	0	2.6	0	2.6	124.5	125	119.5	23	19	20
15	8	2	2	4	-	-	-	12.9	2.5	0	7.5	114.5	120	119	23	21.5	23.5
16	9	3	2	4	14	8	21	2.9	0	8.7	1.4	123	123	124	22.5	25	25
17	9	2	4	3	4	8	13	0	0	0	0	120	139	128	23	34	26.5
18	9	3	2	5	9	12	19	9	0	0	0	120	121.5	133.5	20	26	30.5
19	11	3	4	7	6	13	15	0	0	3.1	5.9	131	130	143.5	26.5	27.5	53.5
20	12	4	4	5	3	26	13	0	3	0	0	133	130.5	143	30	28.5	37.5
21	13	4	6	6	13	26	42	11.8	0	0	39.3	145	149	150	39	45	51

Key: Column A has the founding scores.

Column B has the orphans scores.

Column C has the public-school children scores.

- i.e. not tested.

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