

# MATERNAL CARE AND MENTAL HEALTH

A report prepared on behalf of the World Health Organization  
as a contribution to the United Nations programme  
for the welfare of homeless children

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## CONTENTS

	Page
Preface to second edition . . . . .	5
Preface to first edition . . . . .	6
PART I. ADVERSE EFFECTS OF MATERNAL DEPRIVATION	
1. Some origins of mental ill-health . . . . .	11
2. Review of evidence on effects of deprivation. I : Direct studies . . . . .	15
3. Review of evidence on effects of deprivation. II : Retrospective and follow-up studies . . . . .	30
4. Interim conclusions . . . . .	46
5. Theoretical problems . . . . .	52
6. Research into effects of deprivation . . . . .	59
PART II. PREVENTION OF MATERNAL DEPRIVATION	
7. The purpose of the family . . . . .	67
8. Causes of family failure in Western communities, with special reference to psychiatric factors . . . . .	72
9. Prevention of family failure . . . . .	84
10. Illegitimacy and deprivation . . . . .	93
11. Substitute families. I : Adoption . . . . .	101
12. Substitute families. II : Boarding-homes . . . . .	109
13. Group care . . . . .	129
14. Care of maladjusted and sick children . . . . .	139
15. Administration of child-care services, and problems for research . . . . .	150
Conclusion . . . . .	157
APPENDICES	
Appendix 1. Various retrospective studies relating mental illness to deprivation and broken homes . . . . .	161
Appendix 2. Differences in Rorschach responses between institution children and others . . . . .	166
Appendix 3. Note on Goldfarb's study of social adjustment in relation to age of entry to an institution . . . . .	169
Appendix 4. Note on statistics regarding causes of children being taken into care away from home . . . . .	170
Bibliography . . . . .	175
Name index . . . . .	181
Subject index . . . . .	183

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## TABLES

	Page
I. Order of appearance of adverse reactions in institution infants (Gesell & Amatruda) . . . . .	17
II. Mean developmental quotient of infants at beginning and end of first year with regard to social class and to experience (Spitz) . . . . .	18
III. Comparative DQs and IQs of institution and family children aged from one to four years . . . . .	19
IV. Incidence of separation and affectionless character in a group of thieves and a control group of emotionally disturbed children who did not steal (Bowlby) . . . . .	33
V. Incidence of adverse genetic factors in a group of thieves and a control group of emotionally disturbed children who did not steal (Bowlby) . . . . .	34
VI. Differences between children who had spent their first three years in an institution and controls who had not (Goldfarb) . . . . .	37
VII. Incidence of problems in children who had spent their first three years in an institution and controls who had not (Goldfarb) . . . . .	38
VIII. Comparison of social adjustment of children who had spent five years or more in an institution and those who had had no institutional care (Theis) . . . . .	40
IX. Distribution of social maturity scores : (a) by experience (b) by heredity (Bodman) . . . . .	41
X. Relation of therapeutic response of delinquent girls to their early family experiences (Powdermaker et al.) . . . . .	50
XI. Childhood circumstances of parents of children committed to care (Dr. Barnardo's Homes) . . . . .	79
XII. Incidence of maladjustment related to age at which illegitimate child is permanently settled (Toronto study) . . . . .	97
XIII. Incidence of favourable attitudes among parents of adopted children aged four years plus (Michaels & Brenner) . . . . .	107
XIV. Comparison of behaviour of 100 children following changes in home according to whether they did or did not have contact with previous home (Cowan & Stout) . . . . .	113
XV. Comparison of behaviour of 30 children : (a) after changes of home but maintaining some contact with previous home, and (b) after changes followed by no contact (Cowan & Stout) . . . . .	113
XVI. Success and failure of foster-placement according to attitudes of parents and children (Malone) . . . . .	119
XVII. Comparison of social adjustment in adult life of children placed away from home, according to nature of parents' characters (Theis) . . . . .	122
XVIII. Comparison of success or failure of foster-home placement of children according to nature of their heredity (Healy et al.) . . . . .	123
XIX. Incidence of broken homes among patients suffering from various forms of neurotic disability . . . . .	164
XX. Differences in Rorschach responses between children who had spent their first three years in an institution and controls who had not (Goldfarb) . . . . .	166
XXI. Causes of children being deprived of a normal home life . . . . .	171

## PREFACE TO SECOND EDITION

It is pleasing that the welcome given to the first edition of this monograph should so soon have necessitated a second. It remains unchanged apart from minor textual corrections, and the addition of an index.

In the meantime the plea for further research made in chapter 6 has not gone unheeded ; the International Children's Centre, Paris, is now supporting such research both in England and France. The Centre has also done much to further a wider understanding of the effects of maternal deprivation by the international seminars which it has sponsored. It is to be hoped that other bodies interested in research will follow its example.

February 1952

JOHN BOWLBY

## PREFACE TO FIRST EDITION

At the third session of the Social Commission of the United Nations, held in April 1948, it was decided to make a study of the needs of homeless children.<sup>143</sup> These were described as "children who are orphaned or separated from their families for other reasons and need care in foster homes, institutions or other types of group care". The study was to be confined to "children who were homeless in their native country", thus explicitly excluding refugees from war or other disaster. When the specialized agencies interested in the matter were approached by the United Nations for their comments and suggestions, the World Health Organization offered to contribute a study of the mental health aspects of the problem. This offer was accepted and has resulted in the present report.

I took up my temporary appointment with the World Health Organization in January 1950, and during the late winter and early spring visited several countries in Europe—France, the Netherlands, Sweden, Switzerland, and the United Kingdom—and the United States of America. In each I had discussions with workers, most of whom were concerned with child care and child guidance, saw something of their work, and was introduced to the literature. In these discussions I found a very high degree of agreement existing both in regard to the principles underlying the mental health of children and the practices by which it may be safeguarded. In compiling this report my task has thus been to do justice to an extensive literature and to bring out the many points of importance to which my attention has been drawn; little time has had to be expended in reconciling divergent views.

A word of explanation is needed in regard to the large number of figures and tables which I have quoted. In almost every case the tables appearing in this report have either been constructed from data not available in tabular form or represent simplifications of tables given in the original papers. Moreover, in a number of cases where tests of significance had not been done on data which were nevertheless adequate for testing, I have had them calculated, using the chi-square method.

It will be obvious that I am indebted for help to a wide circle of colleagues in many countries and I take this opportunity to thank them for so generously giving me of their time and hospitality and making my tour so profitable and enjoyable. I also wish to thank my many correspondents for replying so promptly to my requests for reports and information. It has unfortunately not been possible to make full use of much of the material

I have been given, and my difficulty in doing justice to publications in languages other than English has been a source of particular concern. While it has been my endeavour to cover all the literature on the adverse effects of maternal deprivation, the subject of Part I, I am aware of many omissions in my references to the literature on family and child care, which is now very large. My aim in the second part of this report has been rather to deal with certain special aspects of the subject which have tended to be neglected.

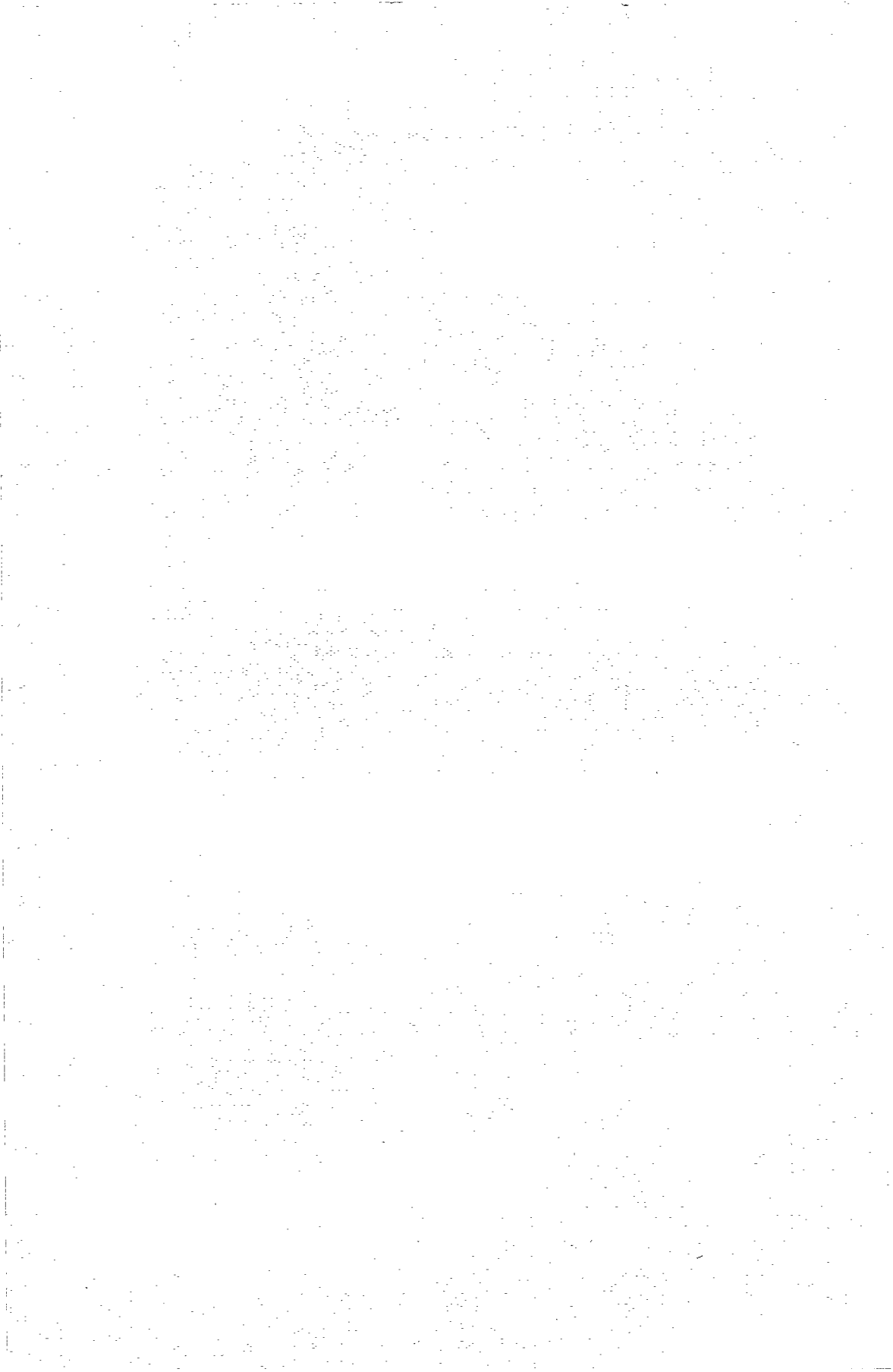
My gratitude is due, too, to the North West Metropolitan Regional Hospital Board and the Management Committee responsible for the Tavistock Clinic for giving me leave of absence for this work with WHO, and also to my colleagues at the Clinic who shouldered extra burdens to enable me to undertake it.

Many of the concepts contained in Part I have been clarified in discussion during the past two years with members of a research team at the Tavistock Clinic which has for its aim the study of the effects on personality development of separation from the mother in early childhood. To the Sir Halley Stewart Trust which initiated this project, and to Mr. James Robertson, Miss Mary Flanders, and Dr. Dugmore Hunter who have taken part in it and have assisted me in numerous ways, I owe especial thanks. In particular, I would like to thank Mr. Eric Trist of the Tavistock Institute of Human Relations who has also taken part in the planning of this project and whose theoretical insight and wide knowledge have been of the greatest value to me over many years.

Finally, I should like to thank Dr. Ronald Hargreaves, Chief of the Mental Health Section of the World Health Organization, for his help in planning my visits and discovering the literature, and for much personal kindness, and M. Philippe Kocher, his research assistant, for abstracting many papers and books.

October 1950

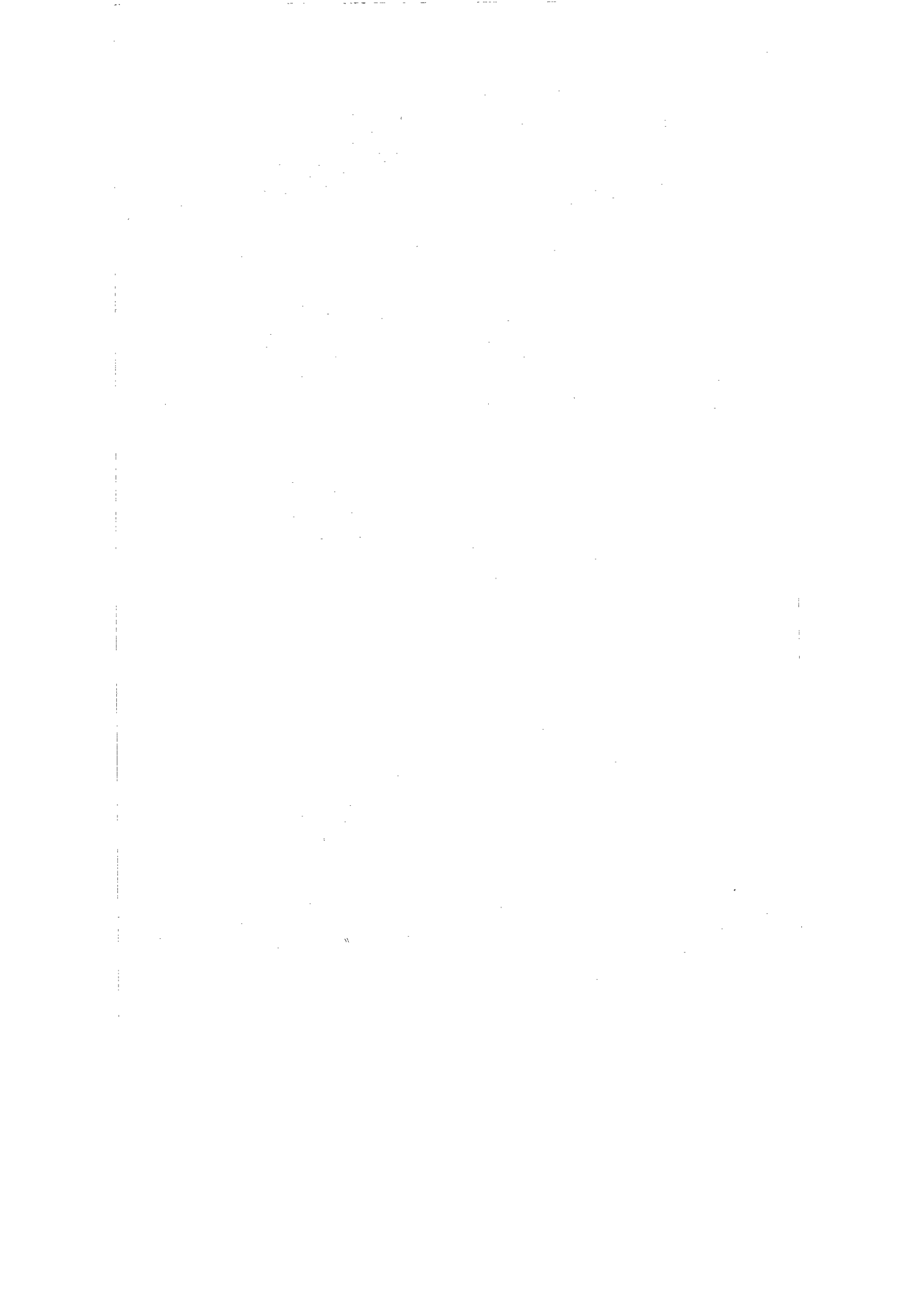
JOHN BOWLBY





**Part I**

**ADVERSE EFFECTS OF MATERNAL DEPRIVATION**



## CHAPTER 1

### SOME ORIGINS OF MENTAL ILL-HEALTH

Among the most significant developments in psychiatry during the past quarter of a century has been the steady growth of evidence that the quality of the parental care which a child receives in his earliest years is of vital importance for his future mental health. Such evidence came first from the psycho-analytic treatment of adults and then from that of children. It has been greatly amplified during the past decade by information gathered by psychologists and psychiatrists working in child guidance and child care—two fields affording unrivalled opportunities for first-hand observation both of the developing child and of his milieu.

Largely as a result of this new knowledge, there is today a high level of agreement among child-guidance workers in Europe and America on certain central concepts. Their approach to cases, their investigations, their diagnostic criteria, and their therapeutic aims are the same. Above all, the theory of etiology on which their work is founded is the same.

The basic principles of this theory of the origins of mental health and mental illness will be discussed more fully later. For the moment it is sufficient to say that what is believed to be essential for mental health is that the infant and young child should experience a warm, intimate, and continuous relationship with his mother (or permanent mother-substitute) in which both find satisfaction and enjoyment. Given this relationship, the emotions of anxiety and guilt, which in excess characterize mental ill-health, will develop in a moderate and organized way. When this happens, the child's characteristic and contradictory demands, on the one hand for unlimited love from his parents and on the other for revenge upon them when he feels that they do not love him enough, will likewise remain of moderate strength and become amenable to the control of his gradually developing personality. It is this complex, rich, and rewarding relationship with the mother in the early years, varied in countless ways by relations with the father and with siblings, that child psychiatrists and many others now believe to underlie the development of character and of mental health.

A state of affairs in which the child does not have this relationship is termed 'maternal deprivation'. This is a general term covering a number of different situations. Thus, a child is deprived even though living at home if his mother (or permanent mother-substitute) is unable to give him the loving care small children need. Again, a child is deprived if for any

reason he is removed from his mother's care. This deprivation will be relatively mild if he is then looked after by someone whom he has already learned to know and trust, but may be considerable if the foster-mother, even though loving, is a stranger. All these arrangements, however, give the child some satisfaction and are therefore examples of partial deprivation. They stand in contrast to the almost complete deprivation which is still not uncommon in institutions, residential nurseries, and hospitals, where the child often has no one person who cares for him in a personal way and with whom he may feel secure.

The ill-effects of deprivation vary with its degree. Partial deprivation brings in its train acute anxiety, excessive need for love, powerful feelings of revenge, and, arising from these last, guilt and depression. These emotions and drives are too great for the immature means of control and organization available to the young child (immature physiologically as well as psychologically). The consequent disturbance of psychic organization then leads to a variety of responses, often repetitive and cumulative, the end products of which are symptoms of neurosis and instability of character. Complete deprivation, with which we shall be dealing principally in this report, has even more far-reaching effects on character development and may entirely cripple the capacity to make relationships.

The evidence on which these views are based is largely clinical in origin. Immensely valuable though this evidence is, it is unfortunately neither systematic nor statistically controlled, and so has frequently met with scepticism from those not engaged in child psychiatry.

Investigators with a statistical bent have worked with the concept of the 'broken home' and a number of studies have demonstrated a relation between maladjustment and this situation. As an example an extensive study undertaken by Menut<sup>101</sup> may be quoted. He compared 839 children suffering from behaviour disorders with nearly 70,000 controls from the schools of Paris, and found that of the problem children 66% came from broken homes while of the controls only 12% did so. In a subsequent more detailed study of 100 of the problem children from broken homes he assessed the broken home itself as being a main causative factor in 84. A review of similar studies is given in Appendix 1.<sup>a</sup>

But though these studies have been of value in amplifying and confirming clinical evidence of the far-reaching importance of the child's early experience in his home, the concept of the broken home is scientifically unsatisfactory and should be abandoned. It includes too many heterogeneous conditions having very different psychological effects.

In place of the concept of the broken home we need to put the concept of the disturbed parent-child relationship which is frequently, but not necessarily, associated with it. If the child's developing relationships with

<sup>a</sup> See page 161.

his mother and his father are used as the focal point, data of far greater precision emerge, and much that is obscure in the origins of mental illness begins to become clear. An illustration of the fruitfulness of this standpoint is a recent study by Stott,<sup>137</sup> who has published the full case-histories of 102 persistent offenders aged between 15 and 18 years who were in an English Approved School. In this comparatively large series he has demonstrated clearly how anxieties arising from unsatisfactory relationships in early childhood predispose the children to respond in an antisocial way to later stresses. Most of the early anxiety situations noted by Stott are particular aspects of maternal deprivation.

Naturally, parent-child relationships have many dimensions and there are many other ways besides deprivation, arising from separation or outright rejection, in which they may become pathogenic. The commonest are (a) an unconsciously rejecting attitude underlying a loving one, (b) an excessive demand for love and reassurance on the part of a parent, and (c) a parent obtaining unconscious and vicarious satisfaction from the child's behaviour, despite conscious condemnation of it. These themes, however, do not concern this report; nor does it treat in detail the child's relation to his father. The reason for this is that almost all the evidence concerns the child's relation to his mother, which is without doubt in ordinary circumstances by far his most important relationship during these years. It is she who feeds and cleans him, keeps him warm, and comforts him. It is to his mother that he turns when in distress. In the young child's eyes father plays second fiddle and his value increases only as the child's vulnerability to deprivation decreases. Nevertheless, as the illegitimate child knows, fathers have their uses even in infancy. Not only do they provide for their wives to enable them to devote themselves unrestrictedly to the care of the infant and toddler, but, by providing love and companionship, they support her emotionally and help her maintain that harmonious contented mood in the aura of which the infant thrives. In what follows, therefore, while continual reference will be made to the mother-child relation, little will be said of the father-child relation; his value as the economic and emotional support of the mother will be assumed.

Theories which place the origins of mental disturbances in these intimate domestic events are, of course, in strong contrast to the theories which stem from the German school of psychiatry. These stress constitutional and inherited factors, at times to a point reminiscent of Calvinistic predestination. Suffice it to say that evidence for these extreme views does not exist and that the relative weights of nature and nurture remain still to be determined. In this connexion, it is useful to remember that recent work in embryology has produced a steady accumulation of evidence that pathological changes in the embryo's environment may cause faults of growth and development exactly resembling those that in the past have been ascribed to pure genetic causes.<sup>45</sup> This is a finding of great importance, which, as

will be seen, is exactly paralleled in psychology. It is to be emphasized, however, that such findings in no way contradict theories postulating the adverse influence of hereditary factors, except in so far as these are held in the extreme form that hereditary factors alone account for all differences in human behaviour. Indeed, all those subscribing to the views set out in this report believe that in the final analysis hereditary factors will be shown also to play a part and that the greatest scientific progress will be made when the interaction of the two can be studied.

A second far-reaching biological principle also stems from embryology, namely, the discovery that the harmful effects on the embryo of trauma, intoxication, infection, and other potentially damaging processes vary not only with the nature of the offending agent and the structure and function of the tissue mainly attacked but also with the maturity of that tissue. In the psychological field this principle is illustrated in the now classic work of Hunt,<sup>79</sup> who demonstrated experimentally that the starvation of rats on the 24th day of life left traces on behaviour clearly discernible in adult life, while a similar experience at 36 days had no such effect.

Finally, it may be noted that in the physiological sphere it has been observed that the evil effects on an organ are especially far-reaching when noxious influences operate during its earliest phases of development, as for instance in the case of rubella where maximal damage is caused between the sixth and tenth weeks of foetal life. The identity of the biological principle at work here and that invoked by psychiatrists who impute far-reaching effects to certain emotional experiences occurring in the earliest phases of mental functioning, as early as the first six months of life, will be apparent. It may be said, therefore, that these theories, so far from being inherently improbable, are strictly in accord with accepted biological principle.

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## CHAPTER 2

### REVIEW OF EVIDENCE ON EFFECTS OF DEPRIVATION

#### I: DIRECT STUDIES

##### Classes of Evidence

Evidence that the deprivation of mother-love in early childhood can have a far-reaching effect on the mental health and personality development of human beings comes from many sources. It falls into three main classes :

(a) Studies, by direct observation, of the mental health and development of children in institutions, hospitals, and foster-homes—direct studies.

(b) Studies which investigate the early histories of adolescents or adults who have developed psychological illnesses—retrospective studies.

(c) Studies which follow up groups of children who have suffered deprivation in their early years with a view to determining their state of mental health —follow-up studies.

The extent to which these studies, undertaken by people of many nations, varied training and, as often as not, ignorant of each others' conclusions, confirm and support each other is impressive. What each individual piece of work lacks in thoroughness, scientific reliability, or precision is largely made good by the concordance of the whole. Nothing in scientific method carries more weight than this. Divergent voices are few. Indeed, only three have come to light, all follow-up studies, but of a quality which bears no comparison with that of the research the conclusions of which they challenge.

The direct studies are the most numerous. They make it plain that, when deprived of maternal care, the child's development is almost always retarded—physically, intellectually, and socially—and that symptoms of physical and mental illness may appear. Such evidence is disquieting, but sceptics may question whether the retardation is permanent and whether the symptoms of illness may not easily be overcome. The retrospective and follow-up studies make it clear that such optimism is not always justified and that some children are gravely damaged for life. This is a sombre conclusion which must now be regarded as established.

There are, however, important features of the situation about which little is known. For instance, it is by no means clear why some children succumb and some do not. It may be that hereditary factors play a part,

but, before resorting to a principle which has been so readily invoked as a universal solvent of biological problems, it is important to review what is known of the effects of such factors as the child's age, and the length and, especially, the degree of his deprivation, each of which there is reason to think is vital.

The three classes of evidence will now be reviewed, attention being paid throughout to data which may help towards an understanding of the role played by these three factors.

#### Direct Studies

Direct observations of the ill-effects on young children of complete deprivation of maternal care have been made by a large number of paediatricians, psychologists, and child psychiatrists and have shown that the child's development may be affected physically, intellectually, emotionally, and socially. All children under about seven years of age seem to be vulnerable and some of the effects are clearly discernible within the first few weeks of life.

Bakwin<sup>7, 8</sup> and Ribble<sup>120</sup> have each given detailed accounts of the adverse effects on physical health. Bakwin,<sup>8</sup> who gives a valuable survey of the paediatric literature on the subject which goes back at least to 1909, summarizes his own observations thus :

"Infants under 6 months of age who have been in an institution for some time present a well-defined picture. The outstanding features are listlessness, emaciation and pallor, relative immobility, quietness, unresponsiveness to stimuli like a smile or a coo, indifferent appetite, failure to gain weight properly despite the ingestion of diets which, in the home, are entirely adequate, frequent stools, poor sleep, an appearance of unhappiness, proneness to febrile episodes, absence of sucking habits."

These changes, he remarks, are not observable in the first 2-4 weeks of life, but can be seen any time thereafter, sometimes within a few days of the baby's separation from his mother. The failure of such babies to smile at the sight of a human face has been confirmed experimentally by Spitz & Wolf<sup>135</sup> while Gesell & Amatruda<sup>57</sup> have noted a diminished interest and reactivity to be characteristic as early as 8-12 weeks. A very careful study of the infant's babbling and crying by Brodbeck & Irwin<sup>30</sup> showed that babies from birth to six months in an orphanage were consistently less vocal than those in families, the difference being clearly discernible before two months of age. As will be seen, this backwardness in 'talking' is especially characteristic of the institution child of all ages.

This diverse evidence from reputable workers leaves no room for doubt that the development of the institution infant deviates from the norm at a very early age. If the regime is continued, the deviations become more pronounced. Gesell & Amatruda have listed their appearance (see table I).

These findings, while giving more detail, confirm in principle those of such early workers in the field as Ripin,<sup>123</sup> Vance, Prall, Simpson



**TABLE I. ORDER OF APPEARANCE OF ADVERSE REACTIONS IN INSTITUTION INFANTS (GESELL & AMATRUDA)**

Adverse reactions	Time of appearance
Diminished interest and reactivity . . . . .	8 — 12 weeks
Reduced integration of total behaviour . . . . .	8 — 12 weeks
Beginning of retardation evidenced by disparity between exploitation in supine and in sitting positions . . . . .	12 — 16 weeks
Excessive preoccupation with strange persons. . . . .	12 — 16 weeks
General retardation (prone behaviour relatively unaffected). . . . .	24 — 28 weeks
Blandness of facial expression . . . . .	24 — 28 weeks
Impoverished initiative . . . . .	24 — 28 weeks
Channelization and stereotypies of sensori-motor behaviour . . . . .	24 — 28 weeks
Ineptness in new social situations . . . . .	44 — 48 weeks
Exaggerated resistance to new situations . . . . .	48 — 52 weeks
Relative retardation in language behaviour . . . . .	12 — 15 months

& McLaughlin (reported by Jones & Burks<sup>65</sup>), and Durfee & Wolf.<sup>50</sup> Using the Hetzer-Wolf baby tests, the latter compared the developmental quotients (DQ)<sup>b</sup> of 118 infants in various institutions and correlated their findings with the amount of maternal care which the infants received. Although they discerned no differences before the age of three months, differences steadily increased so that the children who had been institutionalized for more than eight months during the first year showed such severe psychiatric disturbances that they could not be tested.

Spitz,<sup>133</sup> with Wolf, using the same tests, has more recently made a systematic study of the adverse effects which occur during the first year if the child is kept throughout in an institutional environment. They studied altogether four groups of children, in three of which the babies were with their mothers and one where they were not. Though the absolute levels of development, not unexpectedly, differed according to the social group the babies came from, there was no change of quotient during the year in the case of the babies, 103 in all, who lived with their mothers. The group of 61 brought up in an hygienic institution, on the other hand, showed a catastrophic drop of developmental quotient between the ages of 4 and 12 months. This is shown in table II.

At the earlier age the average DQ was 124 and second in magnitude of the four groups. By 12 months it had sunk to 72 and was by far the lowest. By the end of the second year it had sunk to 45. The last two figures indicate grave retardation.

In confirmation of earlier work, Spitz & Wolf's results show that most of the drop in DQ had taken place during the first six months of life.

<sup>b</sup> The developmental quotient, although calculated in a way similar to the intelligence quotient (IQ), is concerned with general physical and mental development, of which intelligence is only a part. A DQ of 90-110 represents average development.

**TABLE II. MEAN DEVELOPMENTAL QUOTIENT OF INFANTS AT BEGINNING AND END OF FIRST YEAR WITH REGARD TO SOCIAL CLASS AND TO EXPERIENCE (SPITZ)**

Social class	Presence or absence of mother	Number of cases	Developmental quotient	
			Average of 1st to 4th months	Average of 9th to 12th months
Unselected urban	absent	61	124	72
Professional . . .	present	23	133	131
Peasant . . . . .	present	11	107	108
Delinquent unmarried mothers . .	present	69	101.5	105

It is true that these infants were living in conditions especially bad from the psychological point of view, as not only was there but one nurse to some seven children, but, for reasons of hygiene, the children were kept restricted to cots and cubicles in what amounted to solitary confinement. However, studies such as those of Rheingold<sup>119</sup> and Levy<sup>92</sup> make it plain that retardation may occur in conditions which are far from being as adverse as these. Rheingold studied 29 children aged from 6 months to 2½ years (mostly between 9 and 15 months) all of whom were awaiting adoption. All had been cared for by foster-mothers; 15 with no other young children, the remainder with up to three others in the same foster-home. Those receiving all the foster-mother's attention were on the average accelerated in development while those who had to share it with other babies were retarded to a statistically significant degree. Levy also studied infants awaiting adoption. Her main sample was composed of 122 babies, 83 cared for in an institution and 39 in foster-homes, all of whom had come into the agency's care within their first two months of life, and had been tested around six months of age. Those in the institution were in one large nursery, which had accommodation for 17 babies and was staffed by a total of 10 practical nurses, there never being fewer than two in attendance during the day. The DQs on Gesell tests are shown to be slightly above average for the foster-home children and slightly below for the institutionalized, a difference which is statistically significant. Unfortunately, neither Rheingold nor Levy give their results in a form comparable to those of Spitz & Wolf, but it is clear that the drop in DQ in Levy's institutional group is far less than that of the group studied by Spitz & Wolf, a result which no doubt reflects the better psychological conditions in which they lived.

There are several studies showing similar retardation in *the second and later years*. One of the earliest was that of Gindl et al.<sup>58</sup> who, working in prewar Vienna, showed a difference of 10 points in mean DQ between

a group of 20 children aged from 15 to 23 months who had spent six months or more in an institution and a similar group brought up in the poorest of homes. Confirmation comes from Denmark, France, and the USA.

Goldfarb,<sup>66</sup> in a very thorough study of 30 children aged 34-35 months, half of whom had lived in an institution and the other half in foster-homes from four months of age, found a difference of 28 points of IQ on the Stanford-Binet test between the two groups. The IQs of the foster-home group averaged 96, which is average, those of the institution children 68, which is seriously retarded and borders on mentally defective. The difference on the Merrill-Palmer test was less dramatic but none the less serious, figures being 91 and 79 respectively.

Simonsen,<sup>130</sup> using the Hetzer-Bühler tests, compared a group of 113 children, aged between one and four years, almost all of whom had spent their whole lives in one of some 12 different institutions, with a comparable group who lived at home and attended day nurseries. The mothers of these children were working and the homes often very unsatisfactory. Even so, the average DQ of the family children was normal—102—while that of the institution children retarded—93. This difference is found consistently at each of three age-levels, namely, children in the second, third, and fourth years of life.

**TABLE III. COMPARATIVE DQs AND IQs OF INSTITUTION AND FAMILY CHILDREN AGED FROM ONE TO FOUR YEARS**

Investigators	Tests	Time spent in institution	DQs/IQs	
			Institution group	family group
Gindl et al. . . . .	Hetzer-Bühler	at least 6 months	90	100
Goldfarb . . . . .	Stanford-Binet Merrill-Palmer	from about 4 months	68 79	96 91
Simonsen . . . . .	Hetzer-Bühler	from birth	93	102
Roudinesco & Appell	Gesell	at least 2 months	59	95

Finally, Roudinesco & Appell<sup>126</sup> are at present making a similar study in Paris, taking as their sample children, also aged from one to four years, who have spent two months or more in an institution. This group numbers 40. The control group of 104 children of similar age and social class is drawn from nursery schools situated in poor districts. Using the Gesell tests, they found that the average DQ of the children living with their families was 95, that of the institution children as low as 59. As in Simonsen's study, the adverse effects seem to obtain throughout the age-range, though their numbers are still rather small for firm conclusions to be

drawn. An important finding confirming the work of Durfee & Wolf and of Spitz & Wolf, though in this case it refers to an older age-group, is that the longer the child is in the institution, the lower becomes the DQ. Although numbers in each subgroup are small, totalling between 12 and 30, the consistency of the finding in each of the subtests suggests its reliability. The overall DQ drops from about 65 for those who have been in for between two and six months to about 50 for those in for more than a year.

These four studies from four different countries using as criteria four different tests are remarkably consistent. In each case the quotient of the control group averages about 100 while that of the institution group is retarded, very seriously so in the cases of Goldfarb and of Roudinesco & Appell. The results are conveniently tabulated in table III.

Although the results of tests of statistical significance are given only by Goldfarb, the internal consistency of the results of both Simonsen and of Roudinesco & Appell make it clear that in neither case can the results be due merely to chance.

So far only the overall scores on tests of development (Hetzer-Bühler and Gesell) and of intelligence (Stanford-Binet and Merrill-Palmer) have been used as criteria. Studies, however, show that not all aspects of development are equally affected. The least affected is neuromuscular development, including walking, other locomotor activities, and manual dexterity. The most affected is speech, the ability to express being more retarded than the ability to understand. (Speech retardation is sometimes made good remarkably quickly, Burlingham & Freud<sup>39</sup> reporting that "when children are home on visits . . . they sometimes gain in speech in one or two weeks what they would have taken three months to gain in the nursery"). Midway in retardation between motor development and speech come social responses and what Gesell calls 'adaptivity'. Here again there is remarkable agreement between a number of different workers, among whom may be mentioned Gindl et al., Goldfarb (who gave special attention to speech), Burlingham & Freud, Simonsen, and Roudinesco & Appell.

Though there can be no mistaking the consistency of these findings, their import is frequently questioned on the grounds that many children in institutions are born of parents of poor stock, physically and mentally, and that heredity alone might well account for all the differences. Those who advance this objection do not seem to be aware that in the majority of the studies quoted care has been taken by the investigators to ensure that the control groups, brought up either in their own homes or in foster-homes, are of a similar social class and, as nearly as possible, spring from similar stock. Explicit data on this point are given by Brodbeck & Irwin,<sup>30</sup> Levy,<sup>92</sup> Spitz,<sup>133</sup> and Goldfarb,<sup>66</sup> while in the cases of Gindl et al.,<sup>58</sup> Rheingold,<sup>119</sup> Simonsen,<sup>130</sup> and Roudinesco & Appell,<sup>126</sup> sufficient care has been taken on the point to make it most improbable that heredity

accounts for all the variation. Even so the only certain method of controlling heredity is by the use of a sample of identical twins. Though there are no human twin studies of the problem, Liddell (personal communication) is doing experimental work on twin goat kids, one of whom is separated from its mother for a brief spell each day and the other not. Except for the daily experimental period of 40 minutes, both kids live with and feed from their mother. During the experimental period the lights are periodically extinguished, a stimulus known to create anxiety in goats, and this produces very different behaviour in the twins. The one which is with its mother is at ease and moves around freely; the isolated one is "psychologically frozen" (Liddell's words) and remains cowed in a corner. In one of the first experiments the isolated kid discontinued suckling from its mother and, the experimenters being unaware of this and so unable to help, died of dehydration after a few days. This is ample demonstration of the adverse effects of maternal deprivation on the mammalian young, and disposes finally of the argument that all the observed effects are due to heredity.

Moreover, positive evidence that the causative factor is maternal deprivation comes from innumerable sources. First, there are the very clear findings of Durfee & Wolf, of Spitz & Wolf, and of Roudinesco & Appell that the longer the deprivation, the lower falls the DQ. Secondly, there is experimental evidence that even if the child remains in the same institution, extra mothering from a substitute will diminish the ill-effects. Nearly twenty years ago Daniels studied two groups of two-year olds living in the same institution. "One group was given very little tenderness although adequately cared for in every other respect", while in the other "a nurse was assigned to each child and there was no lack of tenderness and affection. At the end of half a year the first group was mentally and physically retarded, in comparison with the second."<sup>c</sup>

A comparable experiment has been done by Roudinesco & Appell<sup>126</sup> who arranged that each of 11 children, of ages ranging from 19 months to 3 years and 8 months, should have special attention comprising four sessions a week of three-quarters of an hour each with a special member of staff (in 10 cases the psychologist, in 1 case a nurse). Though in some cases therapeutic work was attempted, for most the session consisted of giving the child a chance of regular contact, away from the others, with a sympathetic adult. In several cases the results were very satisfactory. For instance, one child, whose DQ had fallen to 37 and had later (aged 18 months) become untestable, improved to 70 after three months of this treatment, and another of 2½ years, whose DQ had also fallen very low and had become untestable, improved to 100 (average) after a year's work.

<sup>c</sup> Reported by Bühler.<sup>24</sup> It is not clear whether in the second group each child had a separate nurse which the text implies, or whether each child was assigned to a nurse, which seems more likely.

Finally, there is the evidence of spectacular changes in the child's condition following restoration to his mother. Bakwin,<sup>7</sup> after recording the views of the older generation of paediatricians, himself remarks :

"The rapidity with which the symptoms of hospitalism begin to disappear when an afflicted baby is placed in a good home is amazing. It is convincing evidence of the etiologic relation of the emotionally arid atmosphere of the hospital to the symptoms. The baby promptly becomes more animated and responsive ; fever, if present in the hospital, disappears in twenty-four to seventy-two hours ; there is a gain in weight and an improvement in the color."

He cites as an example a boy who at four months of age, the latter two in hospital, weighed less than at birth and whose condition was critical.

"His appearance was that of a pale, wrinkled old man. His breathing was so weak and superficial that it seemed as though he might stop breathing at any moment. When seen twenty-four hours after he had been at home he was cooing and smiling. Though no change had been made in his diet he started to gain promptly and by the end of the first year his weight was well within the normal range. He appeared to be in every way a normal child."

The dramatic and tragic changes in behaviour and feeling which follow separation of the young child from his mother and the beneficent results of restoring him to her are in fact available for all to see and it is astonishing that so little attention has been given to them hitherto. So painful, indeed, are the agonies which these children suffer on separation that it may well be that those who have their care shut their eyes in self-protection. Yet of their existence there can be no doubt, as distressingly similar pictures are given by numerous different investigators.

Bakwin's description of the typical separated infant—listless, quiet, unhappy, and unresponsive to a smile or a coo—has already been quoted. This clinical picture, in the age-range of 6 to 12 months, has been the subject of systematic study by Spitz & Wolf,<sup>134</sup> who named it 'anaclitic depression'. And depression it undoubtedly is, having many of the hallmarks of the typical adult depressive patient of the mental hospital. 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 DQ is precipitous.

In what conditions, it may be asked, does this syndrome develop ? In general, it is characteristic of infants who have had a happy relationship with their mothers up till six or nine months and are then suddenly separated from them without an adequate substitute being provided. Of 95 children studied by Spitz & Wolf and on whom a diagnosis was made, 20% reacted to separation by severe depression and another 27% by mild depression making nearly 50% in all.<sup>d</sup> Almost all those with a close and loving relation

<sup>d</sup>In the original paper another 28 children are shown as "undiagnosed". Subsequent study, it is understood, showed a large number of these cases to fall in the category of "severe depression" so that the figures quoted here are underestimates.

to their mothers suffered, which means that the depressive response to separation is a normal one at this age. The fact that a majority of those with unhappy relationships escaped indicates that their psychic development is already damaged and their later capacity for love likely to be impaired. The illness respected neither sex nor race—boys and girls, white and coloured, all being affected. Although recovery is rapid if the child is restored to his mother, the possibility of psychic scars which may later be reactivated cannot be disregarded, while, if the condition is permitted to continue, recovery is greatly impeded. Spitz & Wolf believe that there is a qualitative change after three months of deprivation, after which recovery is rarely, if ever, complete.

Spitz & Wolf report (verbal communication) that disturbances of development may also follow separation at an even earlier age. These disturbances are much less dramatic than in older babies and were at first described as 'mild depressions', but further observation made this term seem wholly inappropriate since it became evident that the condition was neither mild nor, in the view of Spitz & Wolf, could it properly be classified as depression. These disturbances, to which infants of the age-group three to six months are prone, are insidious in development and much less easily reversed by restoration to the mother. The DQ falls slowly but steadily (not precipitously as in the older babies), and recovery is only partial—perhaps 25%-30% of the drop—instead of almost complete.

These very adverse results, it must be emphasized, can be partially avoided during the first year of life by the children being mothered by a substitute. Hitherto many have thought that substitute care could be completely successful during most of this year. Ribble<sup>120</sup> has expressed doubts, however, and Spitz & Wolf (verbal communication) are now definitely of the opinion that damage is frequently done by changes even as early as three months. Nevertheless, all are agreed that substitute care, even if not wholly adequate, is indispensable and should on no account be withheld. In the second and third years of life, the emotional response to separation is not only just as severe but substitute mothers are often rejected out of hand, the child becoming acutely and inconsolably distressed for a period of days, a week, or even more, without a break. During much of this time he is in a state of agitated despair and either screaming or moaning. Food and comfort are alike refused. Only exhaustion brings sleep. After some days he becomes quieter and may relapse into apathy, from which he slowly emerges to make a more positive response to his strange environment. For some weeks or even months, however, he may show a serious regression to infantile modes of behaviour. He wets his bed, masturbates, gives up talking, and insists on being carried, so that the less experienced nurse may suppose him to be defective.<sup>e</sup>

<sup>e</sup> Description based on unpublished observations of Robertson of the Tavistock Clinic, London.

Naturally there are very many variations of reaction in this age-group and not all children respond in the way described ; and once again it appears to be the children who have had the most intimate and happy relationship with their mothers who suffer most. Those who have been brought up in institutions and have had no permanent mother-figure show no responses of this kind at all, the result of their affective life already having been damaged. Though the inexperienced nurse welcomes the child who regards one adult as being as good as another and criticizes the family baby who reacts violently as having been 'spoilt', all the evidence suggests that the violent reaction is normal and the apathetic resignation a sign of pathological development.

Those who are reluctant to admit the reality and potential seriousness of these reactions often express the belief that a little wise management can easily avoid them. Though much further research is required, there is good reason for believing that the prevention of such responses is very difficult. It is common knowledge that children in their second and third years in hospital are acutely upset after being visited by their parents, and skilled efforts to avoid this happening do not meet with success.<sup>129</sup> Moreover, Burlingham & Freud, who had several years' experience of these problems while running a residential nursery in Hampstead during the second World War, and who made every effort to make the transition from home to nursery easy for the child, were by no means always successful. In one of their monthly reports,<sup>40</sup> they write :

"In dealing with new cases of this kind we have attempted to work out a process of 'separation in slow stages' so as to mitigate its consequences for the child. Though this has proved beneficial with children from three or four years onward, we have found that *very little can be done to prevent regression where children between 1 1/2 and 2 1/2 are concerned*. Infants of that age can stand sudden changes and separations of a day's length without any visible effect. Whenever it is more than that they tend to lose their emotional ties, revert in their instincts and regress in their behaviour" (authors' italics).

They illustrate this difficulty by giving a full account (written by Hellman) of the behaviour of a boy of 24 months who was a well-developed easy child with a good relation to his mother. Despite being looked after by the same mother-substitute and being visited daily by his mother during the first week of his stay, his behaviour deteriorated when she diminished her visits to two a week, and when she gave up visiting he regressed severely.

"He became listless, often sat in a corner sucking and dreaming, at other times he was very aggressive. He almost completely stopped talking. He was dirty and wet continually, so that we had to put nappies on him. He sat in front of his plate eating very little, without pleasure, and started smearing his food over the table. At this time the nurse who had been looking after him fell ill, and Bobby did not make friends with anyone else, but let himself be handled by everyone without opposition. A few days later he had tonsillitis and went to the sickroom. In the quiet atmosphere there he seemed not quite so unhappy, played quietly, but generally gave the impression of a baby. He hardly ever said a word, had entirely lost his bladder and bowel control, sucked a great deal. On his return to the nursery he looked very pale and tired. He was



very unhappy after rejoining the group, always in trouble and in need of help and comfort. He did not seem to recognize the nurse who had looked after him at first."

The long-term after-effects on children of these harrowing experiences can sometimes be calamitous and are discussed later. The immediate after-effects, although not always evident to the untrained observer, are also frequently very disquieting to the psychiatrist. Those most commonly observed are (a) a hostile reaction to the mother on her return, which sometimes takes the form of a refusal to recognize her, (b) an excessive demandingness towards the mother or substitute mother, in which intense possessiveness is combined with intolerance of frustration, acute jealousy, and violent temper tantrums, (c) a cheerful but shallow attachment to any adult within the child's orbit, and (d) an apathetic withdrawal from all emotional entanglements, combined with monotonous rocking of the body and sometimes head banging. These reactions have been observed by many clinicians but are nowhere more vividly described than in the two publications of Burlingham & Freud.<sup>38, 39</sup>

A special note of warning must be sounded regarding the children who respond apathetically or by a cheerful indiscriminating friendliness, since people ignorant of the principles of mental health are habitually deceived by them. Often they are quiet, obedient, easy to manage, well-mannered and orderly, and physically healthy; many of them even appear happy. So long as they remain in the institution there is no obvious ground for concern, yet when they leave they go to pieces, and it is evident that their adjustment had a hollow quality and was not based on a real growth of personality. (Goldfarb<sup>66</sup> has made a detailed study of this in children of about three years of age.) Satisfaction is also expressed on occasion that a child has completely forgotten his mother. Not only is this usually not true, as he shows when he cries for her when in distress, but when it is true it is very serious, for it is on the steady growth and expansion of this relationship that his future mental health depends.

Naturally the particular sequences or mixtures of reactions shown by different children will vary, and will depend greatly on the conditions in which they are living. The advent of a mother-substitute may change a group of apathetic or amiably indiscriminating children into possessive and tempestuous little savages. On the introduction of a substitute mother, Burlingham & Freud<sup>39</sup> report:

"Children, who have shown themselves adaptable and accommodating under group conditions, suddenly become insufferably demanding and unreasonable. Their jealousy and, above all, their possessiveness of the beloved grown-up may be boundless. It easily becomes compulsive where the mother-relationship is no new experience but where separation from a real mother or (and) a former foster-mother has occurred before. The child is all the more clinging, the more it has an inner conviction that separation will repeat itself. Children become disturbed in their play activities when they watch anxiously whether their 'own' nurse leaves the room on an errand or for her off-hour or whether she has any intimate dealings with children outside her family. Tony, three

and one-half, for instance, would not allow Sister Mary to use 'his' hand for handling other children. Jim, two to three, would burst into tears whenever his 'own' nurse left the room. Shirley, four years, would become intensely depressed and disturbed when 'her' Marion was absent for some reason, etc. It is true that all these children had had to cope with a series of traumatic separations in their lives."

Many a mother whose young child has been away from her for a few weeks or months can confirm and amplify such observations. Sometimes on reunion the child is emotionally frozen, unable to express his feelings, sometimes unable even to speak. Then, in a torrent, his feelings thaw. Tearful sobs are succeeded (in those able to speak) by an accusatory "Why did you leave me, Mummy?" Thenceforward for many weeks or months he never allows his mother out of his sight, he is babyish, anxious, and easily angered. Wisely handled, these troubles may gradually fade away, though once again the real possibility of unseen psychic scars must not be forgotten which may be reactivated and give rise to neurosis in later life. That this is a real danger is made clear by Robertson & Bowlby, who have observed acute phobic responses in children, who have apparently recovered emotional equilibrium, when confronted by someone whom they associate with the separation experience (unpublished observation). If the regressive anxious behaviour on return home is unsympathetically handled, vicious circles in the child's relation to his mother develop, bad behaviour being met by rebuffs and punishments, rebuffs and punishments calling forth more babyishness, more demands, more tempers. In this way develops the unstable neurotic personality, unable to come to terms with himself or the world, unable especially to make loving and loyal relationships with other people.

Disturbing though such a sequence of events may be, it is almost certainly less sinister than the case of the child who responds either by withdrawal or by an indiscriminating and shallow friendliness. These responses, which are probably the result of frequent separations or of prolonged separation occurring before about  $2\frac{1}{2}$  years of age and without a substitute figure being available, are the precursors of the grave personality disturbances, commonly called psychopathic, which will be described fully in the next chapter.

At what age, it may be asked, does the child cease to be vulnerable to a lack of maternal care? No doubt vulnerability diminishes slowly and, perhaps, asymptotically. All who have studied the matter would agree that vulnerability between three and five is still serious, though much less so than earlier. During this period children no longer live exclusively in the present and can consequently conceive dimly of a time when their mothers will return, which is beyond the capacity of most children younger than three. Furthermore, the ability to talk permits of simple explanations, and the child will take more readily to understanding substitutes. During this age-period, therefore, it may be said that wise and insightful manage-

ment can go far to mitigate ill-effects, though in its absence very serious reactions, comparable to those of the child between one and three, are not uncommon.

After the age of five vulnerability diminishes still further, though there can be no reasonable doubt that a fair proportion of children between the ages of five and seven or eight are unable to adjust satisfactorily to separations, especially if they are sudden and there has been no preparation. A vivid and distressing picture has been given,<sup>88</sup> by the now grown-up patient, of what it felt like for a boy of six to be incarcerated in hospital for three years. He describes "the desperate homesickness and misery of the early weeks [which] gave way to indifference and boredom during the subsequent months". He describes how he made a passionate attachment to the matron which compensated for the loss of home, but how, on returning, he felt out of place and an intruder. "In the end, this barrenness led me away from home again . . . but no second mother-figure came my way, and indeed I was not then capable of creating stable relationships . . . my responses were exaggerated, often uncalled for, and I became extremely moody and depressed . . . I also became aggressive." Finally, after describing how he had, in later years, gained some understanding of himself, he writes: "I still have aggressions . . . They take the unfortunate form of making me excessively intolerant to my own faults in other people, and are therefore a menace to my relationship with my own children." The impairment of the capacity for successful parenthood is perhaps the most damaging of all the effects of deprivation, a point emphasized in Part II of this report.

Confirmation of this picture is given by Edelston<sup>52</sup> and by more than one study of English children evacuated from the cities during the late war. Edelston gives valuable case-histories of some dozens of children whose neurotic symptoms had either developed or been made worse by separation from the mother, most of the separation experiences being in hospital. Although he does not make a systematic analysis of the age at which the children experienced hospitalization, a reading of his cases makes it plain that, although in about half of them it was during the first three years, in the other half the traumatic experience occurred between about three and eight years. In many of the latter the children could describe clearly how they had felt in hospital, common anxieties being the beliefs either that they would not return home or that they were being sent away for being naughty. Thus a boy of  $7\frac{1}{2}$  who had been three times in hospital or convalescent-home since the age of  $3\frac{1}{2}$  remarked: "I thought I was never coming home again because I was only six years old. I heard my sister say they were going to dump me and that I'd never come home again." Another child, a girl of  $6\frac{3}{4}$ , when being sent to fever hospital in her third year had cried: "I will be a good girl—don't send me." On returning home she was very quiet and sat scared in a corner much of the time. Though she never talked of this experience, she would play elaborate

hospital games with her dolls in which sending them away to hospital was a punishment for naughtiness.

In the surveys of evacuated children between the ages of 5 and 16 undertaken during the late war, there were a sufficient number of reports of an adverse response to confirm this account and to make it clear that children of this age are not yet emotionally self-supporting. Teachers reported that homesickness was prevalent and power of concentration on school-work declined. Bedwetting increased.<sup>81</sup> Burt<sup>42</sup> estimated the overall frequency of nervous symptoms and delinquency to have increased from 17% to 25% of the school population. Though in many cases these responses were transitory and of no serious import, in others the problems persisted on return home. This is mentioned in the British Ministry of Health's survey,<sup>76</sup> and by Carey-Trefzer,<sup>43</sup> whose detailed clinical work is discussed later.

While there is reason to believe that all children under three and a very large proportion between three and five suffer through deprivation, in the case of those between five and eight it is probably only a minority and the question arises—why some and not others? Contrary to what obtains in the younger age-groups, for children of this age the better their relation to their mothers the better can they tolerate separation. A happy child, secure in his mother's love, is not made pathologically anxious; the insecure child, apprehensive of his mother's good feelings towards him, may easily misinterpret events. These misinterpretations, moreover, may smoulder on unknown to anyone, almost unknown to the child himself. The belief that he has been sent away for naughtiness leads to anxiety and hatred, and these in turn to a vicious circle in his relations to his parents. Thus children aged five or eight, who are already prone to emotional troubles, can easily be made far worse by a separation experience, whereas secure children of the same age may come through almost unscathed. Even so, for both groups much will depend on how the child is prepared for the situation, how he is treated during it, and how his mother handles him on his return. Both Edelston<sup>52</sup> and Isaacs<sup>82</sup> have discussed these aspects.

Finally, mention may be made of two very recent studies which, like those of Bakwin, stem from a paediatric and not a psychiatric tradition. These are studies of the growth curves of schoolchildren as measured by the Wetzel Grid,<sup>147</sup> which is a useful device for taking simultaneous account of height and weight changes and also allows for constitutional differences in physique. Neither study gives statistical details, but the two are in close agreement and confirm one another to some degree. Binning,<sup>19</sup> after studying 800 Canadian schoolchildren, reports that changes in the speed of growth are frequently emotional in origin and may take the form either of an acceleration or a lag.

"We found that events in the child's life that caused separation from one or both parents—death, divorce, enlistment of a parent—and a mental environment which gave

the child a feeling that normal love and affection was lacking, did far more to damage growth than did disease, was more serious than all other factors combined in this day of full employment and family allowances."

He also reports that, as growth lag increased, there was increasing danger of either psychosomatic symptoms or behaviour difficulties developing. Fried & Mayer<sup>56</sup> found similar growth disturbances. They studied boys and girls between the ages of about 6 and 13 years admitted to an institution (Cottage Home) on account of personality disturbances following divorce, rejection, or death of parents, and concluded that "socio-emotional disturbance tends to affect physical growth adversely, and that growth failure so caused is much more frequent and more extensive than is generally recognized". They proceed :

"there is, in most of our children with growth failure, a very striking and close parallelism between this physical affliction and socio-emotional adjustment. Onset and recovery in the one is accompanied quite simultaneously by corresponding progress in the other. The great majority of children who show either, show both, and the disturbances are roughly equal, that is, milder and severer forms of physical growth failure are associated with corresponding degrees of emotional trouble."

Binning<sup>20</sup> reports another parallel between physical and mental development, this time between physical growth and intelligence.

"Similarly when the Wetzel Grid shows lag in physical growth, mental growth as shown by Stanford-Binet tests also lags. Indeed when plotting Wetzel grids on children where two intelligence tests have been done, it is possible to predict with uncanny accuracy from the physical growth record just how much reduction of intelligence has taken place in a given time."

These results, if confirmed, are clearly of the greatest interest, opening up new possibilities of research into the interrelation of psyche and soma and providing the clinician with a simple and reliable tool. It must be emphasized, however, that, in contrast to other findings reported here, these conclusions must for the present be regarded as tentative.

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## CHAPTER 3

### REVIEW OF EVIDENCE ON EFFECTS OF DEPRIVATION II : RETROSPECTIVE AND FOLLOW-UP STUDIES

#### Retrospective Studies

Some of the immediately adverse effects of deprivation on young children and some of the short-term after-effects have now been discussed and note taken that those without training in mental health are apt either to deny the existence of such responses or to waive them aside as of no consequence. In this chapter, the tremendous weight of evidence will be reviewed which makes it clear that those who view these responses with concern, so far from crying wolf, are calling attention to matters of grave medical and social significance.

During the late 1930s, at least six independent workers were struck by the frequency with which children who committed numerous delinquencies, who seemed to have no feelings for anyone and were very difficult to treat, were found to have had grossly disturbed relationships with their mothers in their early years. Persistent stealing, violence, egotism, and sexual misdemeanours were among their less pleasant characteristics. Since 1937 there have been many papers on the subject, several of which originated independently and some of which were completed in ignorance of the work of others. The unanimity of their conclusions stamps their findings as authentic.

One of the first cases was recorded by Levy<sup>91</sup> and still stands as typical :

" My first example is an eight-year-old girl who was adopted a year and a half before referral. After an illegitimate birth, the child was shifted about from one relative to another, finally brought to a child placing agency, and then placed in a foster-home for two months before she came to the referring foster parents. The complaints were lying and stealing. The parents described the child's reaction to the adoption as very casual. When they brought her home and showed her the room she was to have all for herself, and took her on a tour of the house and grounds, she showed apparently no emotional response. Yet she appeared very vivacious and ' affectionate on the surface '. After a few weeks of experience with her, the mother complained to the husband that the child did not seem able to show any affection. The child, to use the mother's words, ' would kiss you but it would mean nothing '. The husband told his wife that she was expecting too much, that she should give the child a chance to get adapted to the situation. The mother was somewhat mollified by these remarks, but still insisted that something was wrong. The father said he saw nothing wrong with the child. In a few months, however, he made the same complaint. By this time, also, it was noted that the child was deceitful and evasive. All methods of correction were of no avail. . . The school

teacher complained of her general inattention and her lack of pride in the way her things looked. However, she did well in her school subjects, in keeping with her good intelligence. She also made friends with children, though none of these were close friendships. After a contact of a year and a half with the patient the father said, 'You just can't get to her', and the mother remarked, 'I have no more idea to-day what's going on in that child's mind than I knew the day she came. You can't get under her skin. She never tells what she's thinking or what she feels. She chatters but it's all surface'."

Here, in brief, are many of the typical features :

- superficial relationships ;
- no real feeling—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.

The only atypical item in this case is the child's good schoolwork since more often than not this is seriously impaired.

In the same year as Levy's paper (1937) and in the years following, papers were published in the USA by Powdermaker et al. (1937), Lowrey (1940), Bender (1941, 1946, and 1947), and Goldfarb (9 papers 1943-1949), and in Britain by Bowlby (1940 and 1944). With monotonous regularity each put his finger on the child's inability to make relationships as being the central feature from which all the other disturbances sprang, and on the history of institutionalization or, as in the case quoted, of the child's being shifted about from one foster-mother to another as being its cause. So similar are the observations and the conclusions—even the very words—that each might have written the others' papers :

"These case illustrations are given as examples of emotional pathology caused by primary affect hunger of a severe degree. The symptom complaints are of various types. They include, frequently, aggressive and sexual behaviour in early life, stealing, lying, often of the fantastic type, and, essentially, complaints variously expressed, that indicate some lack of emotional response in the child. It is this lack of emotional response, this shallowness of affect, that explains the difficulty in modifying behaviour" (Levy<sup>91</sup>).

"Early in the work a third group of girls was recognized who were asocial but not obviously neurotic, and with whom no treatment methods seemed of any avail. Later it became clear that the feature common to them was an inability to make a real transference to any member of the staff. There might seem to be a good contact but it invariably proved to be superficial. . . . There might be protestations of interest and a boisterous show of affection, but there was little or no evidence of any real attachment having been made. In going over their previous history, this same feature was outstanding. . . . [These girls] have apparently had no opportunity to have a libidinal relationship in early childhood [and] seem to have little or no capacity to enter into an emotional relation with another person or with a group" (Powdermaker et al.<sup>117</sup>).

"All the children [28 in number] present certain common symptoms of inadequate personality development, chiefly related to an inability to give or receive affection ;

in other words, inability to relate the self to others—the isolation factor. . . . The conclusion seems inescapable that infants reared in institutions undergo an isolation type of experience, with a resulting isolation type of personality” (Lowrey<sup>96</sup>).

“Two special problems were referred to the ward from two child-placing agencies. One came from an agency [in which] there is a feeling that no attachment should be allowed to develop between the child and the boarding home so that by the time the child is five years old, he has no attachment to anybody and no pattern of behaviour. . . . Another special group consisted of children placed in infancy [who] are given the best pediatric care. . . . but have been deprived of social contacts and play materials. . . . These children are unable to accept love, because of their severe deprivation in the first three years. . . . They have no play pattern, cannot enter into group play but abuse other children. . . . They are hyperkinetic and distractible; they are completely confused about human relationships. . . . This type of child does not respond to the nursery group and continues overactive, aggressive and asocial” (Bender & Yarnell<sup>15</sup>).

“Imperviousness and a limited capacity for affective relationships” characterize children who have spent their early years in an institution. “Can it be that the absence of affective relationship in infancy made it difficult or even unnecessary for the institution children to participate later in positive emotional relationships. . . . ?” (Goldfarb<sup>62</sup>).

Meanwhile, insulated from communication with these workers by the Atlantic Ocean, Bowlby<sup>25</sup> was making identical observations in London:

“Prolonged breaks [in the mother-child relationship] during the first three years of life leave a characteristic impression on the child’s personality. Clinically such children appear emotionally withdrawn and isolated. They fail to develop libidinal ties with other children or with adults and consequently have no friendships worth the name. It is true that they are sometimes sociable in a superficial sense, but if this is scrutinized we find that there are no feelings, no roots in these relationships. This, I think, more than anything else, is the cause of their hard-boiledness. Parents and school-teachers complain that nothing you say or do has any effect on the child. If you thrash him he cries for a bit, but there is no emotional response to being out of favour, such as is normal to the ordinary child. It appears to be of no essential consequence to these lost souls whether they are in favour or not. Since they are unable to make genuine emotional relations, the condition of a relationship at a given moment lacks all significance for them. . . . During the last few years I have seen some sixteen cases of this affectionless type of persistent pilferer and in only two was a prolonged break absent. In all the others gross breaches of the mother-child relation had occurred during the first three years, and the child had become a persistent pilferer.”

Since these early communications there have been three major publications—a systematic clinical and statistical study by Bowlby,<sup>26, 27</sup> a review by Bender<sup>14</sup> based on some hundreds of cases seen in the previous ten years, and a series of papers describing most carefully planned and executed research by Goldfarb.<sup>60-68</sup> Both Bender’s and Bowlby’s studies are retrospective in the sense that, as clinicians, they were called upon to examine and treat children showing neurotic symptoms and disturbances of behaviour and, by working back into the children’s histories, unearthed the common factor of deprivation of maternal care—caused either by their being in institutions, or being posted, like parcels, from one mother-figure to another. The objection to these retrospective studies is, of course, that they are concerned only with children who have developed adversely, and fail to take account of those who may have had the same experience but



have developed normally. This shortcoming, however, is made good in ample fashion by Goldfarb.

Bender's conclusions<sup>14</sup> are based on the 5% to 10% of the 5,000 children whom she had under her care in Bellevue Hospital from 1935-1944 and who showed the characteristics already described. She gives a full clinical description of the syndrome, which she terms 'psychopathic behaviour disorder of childhood'.

"There is an inability to love or feel guilty. There is no conscience. The unconscious fantasy material is shallow and shows only a tendency to react to immediate impulses or experiences, although there often are abortive efforts to experience an awareness of the ego or to identify the personality. Their inability to enter into any relationship makes therapy or even education impossible. There is an inability to conceptualize, particularly significant in regard to time. They have no concept of time, so that they cannot recall past experience and cannot benefit from past experience or be motivated to future goals. This lack of time concept is a striking feature in the defective organization of the personality structure . . ."

**TABLE IV. INCIDENCE OF SEPARATION AND AFFECTIONLESS CHARACTER IN A GROUP OF THIEVES AND A CONTROL GROUP OF EMOTIONALLY DISTURBED CHILDREN WHO DID NOT STEAL (BOWLBY)**

	Thieves			Controls
	affectionless	others	all	
Separation . . . . .	12	5	17	2
No separation . . . . .	2	25	27	42
Totals . . . . .	14	30	44	44

Note: Both for the affectionless thieves versus the others, and for all the thieves versus controls,  $P$  is less than .01, which means that there is less than one chance in a hundred that the result is due to chance.

Bender also reports a follow-up study of ten children referred to in her 1941 paper who were seen five years later. This showed that "all remained infantile, unhappy and affectless and unable to adjust to children in the schoolroom or other group situation."

Bowlby,<sup>26, 27</sup> besides giving fairly full case-histories, in some of which the child's response to the traumatic experience can be traced, lays especial emphasis on the tendency of these children to steal. Dividing all the cases he had seen at a child-guidance clinic into those who had been reported as stealing and those who had not, he compares a group of 44 thieves with a control group, similar in number, age, and sex, who although emotionally disturbed did not steal. The thieves were distinguished from the controls in two main ways. First, there were among them 14 children whom Bowlby describes as 'affectionless characters', while there were none in the control group. Secondly, 17 of the thieves had suffered complete

and prolonged separation (six months or more) from their mothers or established foster-mothers during their first five years of life ; only 2 of the controls had suffered similar separations. Neither of these differences can be accounted for by chance. Two further points of great importance were that there was a high and statistically significant degree of overlap between the ' affectionless characters ' and those with a history of separation, and that the affectionless children were far more delinquent than any of the others. Bowlby's results can be tabulated as in table IV.

The overwhelmingly high incidence of separation among the affectionless thieves stands out. When this is contrasted with the incidence of a bad heredity, there can be no doubting that for the affectionless thief nurture rather than nature is the pathogenic agent (see table V).

**TABLE V. INCIDENCE OF ADVERSE GENETIC FACTORS IN A GROUP OF THIEVES AND A CONTROL GROUP OF EMOTIONALLY DISTURBED CHILDREN WHO DID NOT STEAL (BOWLBY)**

	Thieves			Controls
	affectionless	others	all	
Bad heredity . . . . .	3	16	19	18
Heredity not bad . . . . .	11	14	25	26
Totals . . . . .	14	30	44	44

In assessing heredity the presence of neurosis, psychosis, or serious psychopathy in parents or grandparents is taken as the criterion. Evidence is admittedly most imperfect but equally so for the controls as for the thieves. Moreover, the internal clinical evidence in several cases of affectionless character makes it fairly clear that it was the experience of prolonged separation from the mother which was to blame. After reviewing evidence from the work of Burt,<sup>41</sup> Glueck & Glueck,<sup>59</sup> and others which is implicitly confirmatory, Bowlby concludes :

" on the basis of this varied evidence it appears that there is a very strong case indeed for believing that prolonged separation of a child from his mother (or mother substitute) during the first five years of life stands foremost among the causes of delinquent character development ".

Among the cases presented by Bowlby is one of a boy who was believed to have had a good relation to his mother until the age of 18 months but who was then in hospital for nine months, during which time visiting by his parents was forbidden. Others of Bowlby's cases suggest that hospitalization and changes of mother-figure as late as the fourth year can have very destructive effects.

Both Bender and Bowlby thus independently advance the hypothesis that there is a specific connexion between prolonged deprivation in the early

years and the development of an affectionless psychopathic character given to persistent delinquent conduct and extremely difficult to treat.

Of the many other retrospective studies which touch on this problem, though without making this precise connexion, mention has already been made of that by Edelston.<sup>52</sup> Four others will be briefly described. Carey-Trefzer,<sup>43</sup> examining the records of some 200 children under the age of 12 seen at a child-guidance clinic in London during the years 1942-1946 and whose troubles seemed to have been caused or aggravated by the war, found that in 32.5% of the cases the trouble had been caused by evacuation. She proceeds :

"The clinical study has revealed without doubt that evacuation has played a major role both in aggravating neurotic symptoms and in creating deep and persisting disturbances . . . Almost all the 'difficult' and long treatment cases are evacuation cases." This is in contrast, it must be emphasized, to experience of bombing. No less than two-thirds of the children who presented problems after evacuation had been under the age of five when first evacuated. Since the number of young children evacuated in proportion to older ones was small, the figures make clear the extent to which it is especially the young child who is damaged by experiences of this kind.

A review of the total population of the Hawthorne-Cedar Knolls School, near New York, was carried out in April 1950.<sup>83</sup> There were then in residence 137 boys and 62 girls, all but a few of whom were between 13 and 17 years of age. The school specializes in cases presenting grave psychiatric disorders, the principal diagnoses being psychoneurosis 28%, schizophrenia 21%, character neurosis 19%, primary behaviour disorder 13%, and psychopathic personality 10%. The problems comprised truancy and running away, stealing, sexual offences, conflicts with parents, and other aggressive behaviour. Of these children, 14% had been in institutions and 24% in foster-homes before the age of 4. Although these figures cannot be summed, since some children were in both an institution and a foster-home before this age, the degree of disruption of parent-child relations for the whole group is shown by only 25% of them having been brought up by both parents. There are few establishments catering for this type of case which would not show similar figures.

Among studies of adult patients, which have led their authors to the conclusion that love deprivation is the cause of the psychiatric condition, may be mentioned those by Fitzgerald<sup>55</sup> of hysterical patients and Kemp<sup>89</sup> of prostitutes. Fitzgerald advances the view that

"regardless of the nature of an individual's inborn tendencies, he will not develop hysteria unless he is subjected during childhood to situations causing him to crave affection".

Among such situations he lists death of a parent and separation of child from parents. Kemp, who collected information on 530 prostitutes in Copenhagen, found that one-third of them had not been brought up

at home but had spent their childhood under troubled and shifting conditions :

"3% were brought up by close relations, 3% were boarded out or sent to a home, 27% were raised under combined conditions, partly in homes or almshouses, partly in institutions for the feeble-minded or epileptics, partly at home or with relatives" (page 85).

Sometimes they had three or four different foster-homes during the course of their childhood. 17% of the total were illegitimate.

Further evidence tracing delinquency, promiscuity, neurosis, and even psychosis to deprivation, bereavement, and broken homes is given in Appendix 1.<sup>f</sup>

#### Follow-up Studies

All the inquiries so far described have the shortcomings inherent in the retrospective method ; the follow-up studies of Goldfarb and others are therefore of especial value since they take a group of children institutionalized in infancy and seek to determine how they have developed.

The outstanding quality of Goldfarb's work derives from its having been scientifically planned from the beginning to test the hypothesis that the experience of living in the highly impersonal surroundings of an institution nursery in the first two or three years of life has an adverse effect on personality development. With this end in view he selected his samples so that, so far as is possible, they were similar in heredity, and thereby controlled a variable which has been the bugbear of most other investigations. Altogether he has done three main studies.<sup>60, 62, 66</sup> In each he has compared the mental development of children, brought up until the age of about three in an institution and then placed in foster-homes, with others who had gone straight from their mothers to foster-homes in which they had remained. In both samples the children had been handed over by their mothers in infancy, usually within the first nine months of life. The sample most thoroughly studied consisted of 15 pairs of children who, at the time of the examination, ranged in age from 10 to 14 years.<sup>62</sup> One set of 15 was in the institution from about 6 months of age to 3½ years, the other set had not had this experience. Conditions in the institution conformed to the highest standards of physical hygiene but lacked the elementary essentials of mental hygiene :

"Babies below the age of nine months were each kept in their own little cubicles to prevent the spread of epidemic infection. Their only contacts with adults occurred during these few hurried moments when they were dressed, changed or fed by nurses."

Later they were members of a group of 15 or 20 under the supervision of one nurse, who had neither the training nor the time to offer them love or attention. As a result they lived in "almost complete social isolation

<sup>f</sup> See page 161.

during that first year of life " and their experience in the succeeding two years was only slightly richer. Goldfarb has gone to great pains to ensure that the foster-homes of the two groups are similar in respect of all observable criteria and demonstrates further that, in respect of the mother's occupational, educational, and mental status, the institution group was slightly superior to the controls. Any differences in the mental states of the two groups of children are, therefore, virtually certain to be the result of their differing experiences in infancy.

The two groups of children were studied by a great variety of tests and rating scales and all differences checked for the possible influence of chance. A few of the very numerous and striking differences are listed in tables VI and VII.

**TABLE VI. DIFFERENCES BETWEEN CHILDREN WHO HAD SPENT THEIR FIRST THREE YEARS IN AN INSTITUTION AND CONTROLS WHO HAD NOT (GOLDFARB)**

Function tested or rated	Test or rating method	Result expressed as	Results	
			institution group	control group
Intelligence . . . . .	Wechsler	mean IQ	72.4	95.4
Ability to conceptualize . . . . .	Weigl Vigotsky	mean score	2.4	6.8
		mean score	0.5	4.7
Reading . . . . .	standard tests	mean score	5.1	6.8
Arithmetic . . . . .	standard tests	mean score	4.7	6.7
Social maturity . . . . .	Vineland Scale completed by case-workers	mean social quotient	79.0	98.8
Ability to keep rules.	frustration experiment	number of children	3	12
Guilt on breaking rules . . . . .		number of children	2	11
Capacity for relationships . . . . .	case-worker's assessment	number of children able to make normal relationships	2	15
Speech . . . . .		number of children up to average	3	14
Number of children (total) . . . . .			15	15

Note : In the case of all differences shown, P is less than .01.

The number and consistency of these differences is truly remarkable. The disability in the cognitive field is striking and confirmed by several other tests. It is obviously connected with the lowered developmental and intelligence levels observed by those who have made direct studies, and makes it clear that, in some cases at least, the retardation of the institutionalized infant or toddler persists. Goldfarb's discoveries regarding the institution child's inability to conceptualize are particularly valuable

**TABLE VII. INCIDENCE OF PROBLEMS IN CHILDREN WHO HAD SPENT THEIR FIRST THREE YEARS IN AN INSTITUTION AND CONTROLS WHO HAD NOT (GOLDFARB)**

Problem	Rated by	Result expressed as	Results	
			institu- tion group	control group
Unpopular with other children	case- worker	number of children showing problem	6	1
Craving affection . . . . .	"	" "	9	2
Fearful . . . . .	"	" "	8	1
Restless, hyperactive . . . .	"	" "	9	1
Inability to concentrate . . . .	"	" "	10	0
Poor school achievement . . . .	"	" "	15	1
Number of children (total)			15	15

Note : In all cases but the first, P is less than .01. In the first case, it lies between .05 and .02.

as giving a clue to some of the psychological processes underlying the personality disturbances, a point discussed later. Another point which emerges from Goldfarb's work is the persistence of the speech disabilities, noted by so many of the direct observers. In this, he confirms the earlier observations of Lowrey.<sup>96</sup>

Goldfarb's findings<sup>64</sup> regarding the responses to the Rorschach test given by the two groups are set out in Appendix 2.<sup>8</sup> Among the many statistically significant differences are those related to the institution children's inability to conceptualize, their tendency to arbitrary responses, confabulations, lack of control over emotional responses, and diminished drive toward social conformity. Some of these were also found by Loosli-Usteri<sup>94</sup> in her Rorschach study of institution children in Geneva, the findings of which confirm the general conclusion that institution children are psychiatrically disturbed. An outline of this study is given in the same appendix.

Most of Goldfarb's findings in regard to personality disturbances are in line with those of Bender and Bowlby. There are, however, certain differences which are not always easy to interpret (especially in the absence of case-histories, an omission which it is to be hoped Goldfarb will one day make good). The contrast between Goldfarb's finding that institution children "crave affection" and Bowlby's observation of their being "affectionless" is probably more apparent than real. Many affectionless characters crave affection, but nonetheless have a complete inability either to accept or reciprocate it. The poor capacity of all but two of Goldfarb's children for making relationships is clearly confirmatory of all other work.

<sup>8</sup> See page 166.

The fact that only one of this sample of Goldfarb's institution children stole and none truanted is, however, surprising in view of Bowlby's findings. The difference is probably valid and needs explanation. It will be discussed in the next chapter.

The tenor of Goldfarb's summary of his findings in regard to personality disturbances will by now be familiar to the reader :

" Briefly, the institution children present a history of aggressive, distractible, uncontrolled behaviour. Normal patterns of anxiety and self-inhibition are not developed. Human identifications are limited, and relationships are weak and easily broken . . . <sup>68</sup>

" Finally, the fact that the personality distortions caused by early deprivation are not overcome by later community and family experience must be stressed. There is a continuity of essential traits as late as adolescence. If anything, there is a growing inaccessibility to change." <sup>62</sup>

One shortcoming in his discussion should, however, be noted—namely, his tendency to imply that all institutions and their products are the same. This will be referred to later. None the less, for skilful planning and care of execution, Goldfarb's work ranks high ; not until a comparable piece of work has been done with different results can there be reason to doubt his findings.

There are, moreover, several other follow-up studies which, though far less thorough, are in some degree confirmatory. Lowrey,<sup>96</sup> in the paper already quoted, studied a sample of children comprising, among others, 22 unselected cases who with one exception had been admitted to an institution before their first birthday and had remained there until they were three or four, when they were transferred to another agency for fostering. Lowrey examined them when they were five years of age or older. All of them showed severe personality disturbances centering on an inability to give or receive affection. Symptoms, each of which occurred in half or more of them, included aggressiveness, negativism, selfishness, excessive crying, food difficulties, speech defects, and enuresis. Other difficulties only a little less frequent included over-activity, fears, and soiling.

While both Goldfarb and Lowrey report 100% of children institutionalized in their early years to have developed very adversely, the studies of Theis<sup>189</sup> and of Beres & Obers<sup>16</sup> show that many such children achieve a tolerable degree of social adaptation when adult. Though this finding is in accordance with the expectations of the man in the street, it would be a mistake to build too much on it since it is known that very many people who are psychiatrically disturbed are able to make a tolerable external adjustment for long periods. Moreover, both studies demonstrate a high incidence of overt disorder which the authors regard as confirming the pathogenicity of institutional conditions for young children.

As long ago as 1924, Theis<sup>189</sup> undertook a comprehensive study of the social adjustment as adults of 910 people who had been placed in foster-homes as children. In clinical and statistical care it remains in the first

rank, and being a purely social study cannot be accused of psychiatric bias. A particularly interesting comparison is made between 95 children who had spent five years or more of their childhood in institutions and 84 who had spent the same years at home (in 80% of cases in bad homes). Not only had all the children of both groups, later, been placed in foster-homes of similar quality and at similar ages, but so far as could be determined the heredity of the two groups was similar. The results, which are given in table VIII, show that those brought up in an institution adjusted significantly less well than those who had remained during their first five years in their own homes. Since heredity is, so far as possible, held constant for these two groups, the difference cannot be explained in this way. This, indeed, goes into the evidence regarding heredity in fairly considerable detail for her whole sample and presents a table showing that the percentages of success among the offspring of good and of psychopathic parents do not differ significantly (see table XVII, page 122). The fact that no less than one-third of the institution children turned out to be 'socially incapable', of which nearly half were troublesome and delinquent, is to be noted.

**TABLE VIII. COMPARISON OF SOCIAL ADJUSTMENT OF CHILDREN WHO HAD SPENT FIVE YEARS OR MORE IN AN INSTITUTION AND THOSE WHO HAD HAD NO INSTITUTIONAL CARE (THEIS)**

	Early childhood	
	in institution	not in institution
	%	%
Socially capable . . . . .	65.5	82
Socially incapable		
Harmless . . . . .	19	11
Harmful . . . . .	15.5	7
On trial or in institution . . . . .		
	100	100
Number of children . . . . .	95	84

Note : P lles between .02 and .01.

It will be remarked, however, that, despite the institutional experience in the early years, two-thirds turned out 'socially capable'. So far as it goes this is satisfactory, but, as no psychiatric examination was carried out, neurotic and psychosomatic troubles not leading to social incompetence were not recorded. It is virtually certain that the incidence of psychiatric disturbance was much above the 34.5% of overt social incapacity.

Beres & Obers<sup>16</sup> have recently reported on a group of 38 subjects, aged between 16 and 28 (average 20) years, who had been institutionalized



during their first three or four years of life. It is of interest as being the oldest age-group of its kind studied psychiatrically, but it has the very serious defect of not being a random sample : they were all cases requiring additional care and so may be supposed to be more heavily loaded in a pathological direction than a truly representative group. Of the 38, 4 were schizophrenic and 22 suffered from severe character disorders, 7 being affectionless psychopaths. A further 7 are stated to have made a satisfactory adjustment, though from the information given this would appear to have been precarious in some of them, and none had demonstrated his capacity to make a successful marriage partner or parent. What the study brings out clearly is that different children have very different experiences in institutions and respond in many different ways. The authors emphasize especially that not all children who spend their early years in an institution develop into affectionless psychopaths and that those who do not do so can often be greatly helped in later life. They make it clear, however, that institutionalization in early life is usually very injurious to personality growth.

**TABLE IX. DISTRIBUTION OF SOCIAL MATURITY SCORES :**  
**(a) BY EXPERIENCE (b) BY HEREDITY (BODMAN)**

	Number of children	Mean score
<b>(a) Sample divided by experience</b>		
Institution experience . . . . .	51	92.9
Family experience . . . . .	52	105.5
<b>(b) Sample divided by heredity</b>		
Adverse factors in heredity . . . . .	28	91.6
No adverse factors in heredity . . . . .	63	105.0

So far all the evidence has pointed in but one direction. It is now time to consider the three studies which present evidence which purports to call these conclusions in question. It may be said at once that none of them is of high scientific quality or bears comparison with the work either of Goldfarb or of Theis.

Orgel's paper<sup>111</sup> is a brief note commenting on that of Lowrey. He states that he has seen some 16 children, coming from the same institutions and having had the same experiences as Lowrey's sample, and that only two showed adverse features of personality. No details are given and there appears to have been no systematic clinical investigation.

Brown<sup>33</sup> compares a group of 100 boys aged 9 to 14 years living in an institution with another 100 of the same age living at home in bad surround-

ings, where broken homes and familial discords predominate. Using a personality inventory he shows that the two groups are similar in neuroticism. Not only is a personality inventory an unsatisfactory criterion, but no evidence is given regarding the age at which the children entered the institution.

The most recent of the three was carried out by Bodman and his associates<sup>23, 24</sup> in England. In it he compares the "social maturity" of two groups of 15-year-old children: 51 who had spent the previous three years or more in an institution and a comparable 52 who had lived at home. Using the Vineland Social Maturity Scale, he shows that, although the institution children have a lower score than the family children, when the cases are regrouped according to their heredity, an exactly similar difference is to be seen. The figures are set out in table IX.

No tests of significance appear to have been done.

On the basis of these figures, Bodman<sup>23</sup> concludes that

"such a finding certainly weakens the case of those protagonists who argue that any social or personal retardation is attributable exclusively or mainly to environmental influences"

and that it

"suggests that constitutional factors are at least as important as environmental factors in . . . social maturation".

These conclusions are ill-judged and certainly cannot be sustained by the evidence presented. Very oddly, he has not undertaken a tabulation in which the effects of each variable is determined the other being held constant; without this no conclusions are warranted. Apart from this, and the not very satisfactory nature of the Vineland Scale as a criterion, his sampling leaves much to be desired, inasmuch as some of the institution children did not enter until they were quite old, the average age of admission being four years; while, even more serious, of the family children in the control group, no less than 22 had been evacuated from their homes during the war, the average length of time being one year and nine months. Work with so many shortcomings cannot be accepted as calling in question the almost unanimous findings of the workers already quoted.

There is one other group of data which is sometimes quoted as casting doubt on these findings—that from the Jewish communal settlements in Israel known as Kibbutz (plural, Kibbutzim). In these settlements, largely for ideological reasons, children are brought up by professional nurses in a 'Children's House'. Babies are reared in groups of 5 or 6, and are later merged at the age of three years into larger groups numbering 12 to 18. The emphasis is throughout on communal rather than family care. Is not this, it may be asked, a clear example that communal care can be made to work without damaging the children? Before answering this question it is necessary to look more carefully at the conditions in which the children are raised. The following account is taken partly from the report of an

American psychiatric social worker, Alt, who recently visited Israel, and partly from a personal communication from the Lasker Mental Hygiene and Child Guidance Centre in Jerusalem. Both describe life in certain of the non-religious Kibbutzim. Alt<sup>4</sup> remarks :

“ Separation is a relative concept and separation as it appears in the Kibbutz should not be thought of as identical with that of children who are brought up in foster-homes or institutions away from their parents . . . In the Kibbutz there is a great deal of opportunity for close relationship between child and parent.”

Not only does the mother nurse the baby and feed him in the early months, but, to follow the Lasker Centre's description :

“ once the suckling tie between mother and child is abandoned, the daily visit of the child to the room of the parents becomes the focus of family life for the child, and its importance is scrupulously respected. During these few hours the parents, or at least one of them, are more or less completely at the disposal of the children ; they play with them, talk to them, carry the babies about, take the toddlers for little walks, etc.”

The time spent with the children “ may amount to as much as two to three hours on working days and many more on the Sabbath ” (Alt<sup>4</sup>).

Here, then, is no complete abandonment of parent-child relations. Though the amount of time parents spend with their young children is far less than in most other Western communities, the reports make it clear that the parents are extremely important people in the children's eyes, and the children in the parents'. It is interesting to note, too, that the trend is steadily towards parents taking more responsibility. Formerly parents had to visit the children in the Children's House—now the children come to the parents' room and the parents even prepare light meals for them ; feasts are now celebrated in the parents' room as well as communally in the Children's House ; mothers are asserting themselves and demanding to see more of their children.

Finally, it is by no means certain that the children do not suffer from this regime. While both observers report good and co-operative development in adolescence, the Lasker Centre think there are signs of “ a somewhat higher level of insecurity among Kibbutz children than among others, at least until some point in the latency period ”. They also point out that the strong morale and intimate group life of the Kibbutz are of great value to the older child and adolescent and that these may offset some of the unsettlement of earlier years.

From this brief account it is evident that there is no evidence here which can be held to invalidate the hypotheses. The conditions provide, of course, unusually rich opportunities for research in child development, and it is to be hoped these will not be missed.

#### **Observations of War Orphans and Refugees**

Evidence of the adverse effects on children of all ages of separation from their families was provided on a tragic scale during the second World War, when thousands of refugee children from occupied lands in Europe

were cared for in Switzerland and elsewhere. Owing to the scale of the problem there was little time for systematic research, and in any case the children had been submitted to such diverse and often horrifying experiences that it would have been almost impossible to have isolated the effects of separation from those of other experiences. Brosse<sup>31, 32</sup> has summarized the findings of medical, educational, and relief workers and has emphasized that "while the reports tell of disturbances in character resulting from war, they show also the fundamental part played in their causation by rupture of the family tie".<sup>31</sup> In the same volume, Meierhofer reports on experiences with refugee children at the Pestalozzi Village at Trogen, Switzerland:

"No doubt remains that a long period without individual attention and personal relationships leads to mental atrophy; it slows down or arrests the development of the emotional life and thus in turn inhibits normal intellectual development. We have observed that acute psychological traumata, however serious, do not result in such deep injury as chronic deficiencies and prolonged spiritual solitude."

In 1944, Loosli-Usteri<sup>95</sup> undertook a small comparative study of 97 Jewish refugee children in homes in Switzerland and 173 Swiss children of about the same age (11 to 17 years). All the children were asked to write an essay on "What I think, what I wish and what I hope". From a scrutiny of these essays she concluded that for the refugees "separation from their parents is evidently their most tragic experience". In contrast, few of the Swiss children mention their parents, who were evidently felt to be a natural and inevitable part of life. Another great contrast was the refugee children's preoccupation with their suffering past, or frenzied and grandiose ideas regarding the future. The controls lived happily in the present, which for the refugees was either a vacuum or at best an unsatisfying transition. Deprived of all the things which had given life meaning, especially family and friends, they were possessed by a feeling of emptiness.

Szondi also studied refugee children in Switzerland and others in a concentration camp. He describes (personal communication) an 'uprooting syndrome' comprising repression of the need to cling, which, however, manifests itself in symptoms such as bedwetting and stealing, an inability to make relations and a consequent loss of ability to form ideals, and an increase of aggression. He also remarks on the tendency towards an over-active hypomanic attitude. Intolerance of frustration, aggression, and the hypomanic response are mentioned by others with experience of such children.

In the Netherlands after the war, Tibout, de Leeuw, and Frijling studied some thousands of children whose parents had been deported in 1942 and 1943 and who had been cared for in foster-homes, often from earliest infancy. They report (verbal communications) that frequent changes of foster-home almost always had very adverse effects, leading the child to become withdrawn and apathetic. This was sometimes accompanied by a superficial sociability and, later, promiscuity. Some young children managed

to weather a single change, but others could not stand even this and developed symptoms such as anxiety, depression, excessive clinging, and bed-wetting. Many of the children were still emotionally disturbed when examined after the war and in need of treatment. It was noted that those who had had good family relationships before separation could usually be helped to an adjustment, but that those with a bad family background had a poor prognosis.

Finally may be noted an extensive psychological and statistical study undertaken in Spain following the civil war; since it came to hand late and is presented in a language unfamiliar to the writer, it has been impossible to do it justice. Piquer y Jover<sup>114</sup> and his associates report their findings on over 14,000 cases of neglected and delinquent children housed in the environs of Barcelona. Once again there is confirmation of the decisive and adverse role in character development played by the break-up of the family, and the vital importance of family life for satisfactory social and moral development. Particularly interesting is the confirmation of Goldfarb's findings regarding impaired cognitive development. The IQs of the neglected and delinquent children are 20 to 40 points below those of a control group. Piquer y Jover believes the evidence demonstrates that this considerable reduction is the result of environmental rather than hereditary factors and suspects that lack of education is partly to blame for poor performances on tests such as the Stanford-Binet. Impairment of the capacity for abstract thought is also noted—the evidence, in the investigator's opinion, pointing to "the existence of a strong correlation between the development of the abstract mental faculties and the family and social life of the child". He notes especially the following characteristics of the neglected and delinquent child:

"Feeble and difficult attention due to his great instability.

Very slight sense of objective realities, overflowing imagination and absolute lack of critical ability.

Incapacity for strict abstraction and logical reasoning . . .

Noteworthy backwardness in the development of language . . ." <sup>h</sup>

The similarity of these observations on war orphans and refugees to those on other deprived children will not fail to impress the reader.

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<sup>h</sup> Quoted from the author's English abstract.

## CHAPTER 4

### INTERIM CONCLUSIONS

The evidence has been reviewed at some length because much of it is still little known and the issue of whether deprivation causes psychiatric disturbance is still discussed as though it were an open question. It is submitted that the evidence is now such that it leaves no room for doubt regarding the general proposition—that the prolonged deprivation of the young child of maternal care may have grave and far-reaching effects on his character and so on the whole of his future life. Although it is a proposition exactly similar in form to those regarding the evil after-effects of rubella in foetal life or deprivation of vitamin D in infancy, there is a curious resistance to accepting it. Indeed, there are still psychiatrists in all countries who challenge these conclusions, though it is to be remarked that few of them have had training in child psychiatry or experience of work in a child-guidance clinic. Their clinical work is confined to the examination of older patients of an age when it is difficult or impossible to obtain light on what really happened in their early years. Moreover, so embittered and distorted is the information patients commonly give about their childhood experiences that many psychiatrists and even psycho-analysts have regarded their stories as no more than fantasies and have wholly discounted the really adverse effects of an unhappy childhood. It is, of course, true that there are still far too few systematic studies and statistical comparisons in which proper control groups have been used. Relatively few studies taken by themselves are more than suggestive. But when all the evidence is fitted together it is seen to be remarkably consistent and this, taken with the considered opinions of experienced child-guidance workers in many different countries, leaves no doubt that the main proposition is true. Reluctance to accept it is, perhaps, because to do so would involve far-reaching changes in conceptions of human nature and in methods of caring for young children.

However that may be, although the main proposition may be regarded as established, knowledge of details remains deplorably small. It is as though it had been established that an absence of vitamin D caused rickets and that calcium was in some way involved, but as yet no quantitative measures were available and there was complete ignorance of the many interrelated associated factors. That deprivation can have bad consequences is known, but how much deprivation children of different ages can withstand

has yet to be determined. The evidence available may now be summarized and such conclusions drawn as are permissible.

In the first place, there is abundant evidence that deprivation can have adverse effects on the development of children (a) during the period of separation, (b) during the period immediately after restoration to maternal care, and (c) permanently. The fact that some children seem to escape is of no consequence. The same is true of the consumption of tubercular-infected milk or exposure to the virus of infantile paralysis. In both these cases a sufficient proportion of children is so severely damaged that no one would dream of intentionally exposing a child to such hazards. Deprivation of maternal care in early childhood falls into the same category of dangers.

Most of the evidence in respect of long-term effects refers to the grave disturbances following severe deprivation; it is easiest to work from these established connexions to those which are less well understood. The evidence suggests that three somewhat different experiences can each produce the affectionless and psychopathic character:

(a) lack of *any* opportunity for forming an attachment to a mother-figure during the first three years (Powdermaker, Bender, Lowrey, Goldfarb);

(b) deprivation for a limited period—at least three months and probably more than six—during the first three or four years (Bowlby, Spitz & Wolf);

(c) changes from one mother-figure to another during the same period (Levy, and others).

Though the gross results of these different experiences appear the same, it seems probable, both for theoretical and empirical reasons, that close study will reveal differences. For instance, it may well be that the discrepancy as regards stealing between the children studied by Bowlby<sup>26, 27</sup> and by Goldfarb<sup>62</sup> would be explained in this way. All of Goldfarb's cases had been institutionalized from soon after birth until they were three years old. None of Bowlby's had—they were all products of deprivation for a limited period, or of frequent changes. It may well be that their stealing was an attempt to secure love and gratification and so reinstate the love relationship which they had lost, whereas Goldfarb's cases, never having experienced anything of the kind, had nothing to reinstate. Certainly it would appear that the more complete the deprivation in the early years the more isolated and asocial the child, whereas the more that deprivation is interspersed with satisfaction, the more ambivalent and antisocial he becomes. Lowrey<sup>96</sup> may well be right in his belief that "children placed in institutions for short periods after the age of 2 do not develop this isolated type of personality or show the same behavior patterns"; research at present in progress at the Tavistock Clinic tends to confirm this. Nevertheless, Carey-Trefzer<sup>43</sup> and Bowlby have each recorded a sufficient number of cases where the development of extremely antisocial characters, unable

to make stable relations with anyone though not complete isolates, appeared to follow changes from one mother-figure to another during the fourth year, to make it clear that very evil results may follow even at this age. Naturally, the effects on personality development at any given age will depend on the exact nature of the experience to which the child is submitted, information about which is all too frequently missing from records. Indeed, one of the great shortcomings of present evidence is a lack of detail and precision on this point. It has already been remarked that implicit in Goldfarb's writings is the assumption that all infants and toddlers in institutions have similar experiences. Not only is it clear that they do not, but the more one studies all the data on the subject, the more he becomes convinced that the outcome is to a high degree dependent on the exact nature of the psychological experience. If further research is to be fruitful, it must pay minute attention not only to ages and periods of deprivation, but also to the quality of the child's relation to his mother before deprivation, his experiences with mother-substitutes, if any, during separation, and the reception he gets from his mother or foster-mother when at last he becomes settled again.

Though all workers on the subject are now agreed that the first year of life is of vital importance, there is at present some debate regarding the age at which deprivation has the most evil consequences. Bowlby, after reviewing his cases, noted that the separations which appeared pathogenic had all occurred after the age of six months and in a majority after that of 12 months, from which he was inclined to conclude that separations and deprivations in the first six months of life were less important for the child's welfare than later ones. This has also been the view of Anna Freud.<sup>39</sup> It has, however, been called in question explicitly by Spitz & Wolf (verbal communication), and implicitly by Klein,<sup>86</sup> whose data are of a very different kind, having been derived retrospectively from the psycho-analytic treatment of children and adults. Goldfarb also has attached especial importance to the first half-year, although, as is shown in Appendix 3,<sup>1</sup> his data do not really warrant the conclusion he draws from them. Nevertheless, this study of Goldfarb's,<sup>65</sup> in which he examines the social adjustment of adolescents in relation to the age at which they were admitted to the institution, points unmistakably to the special vulnerability of the child during the first year in comparison to later ones. Bender's references<sup>13, 14</sup> to children in whom the deprivation was limited to the first year and who none the less showed the classical retardation and personality distortion provide further evidence regarding the first year as a whole, though they do not contribute to the debate regarding the baby's vulnerability during the first half of it in particular.

For the present, therefore, it may be recorded that deprivation occurring in the second half of the first year of life is agreed by all students of the

<sup>1</sup> See page 169.



subject to be of great significance and that many believe this to be true also of deprivation occurring in the first half, especially from three to six months. The balance of opinion, indeed, is that considerable damage to mental health can be done by deprivation in these months, a view which is unquestionably supported by the direct observations, already described, of the immediately adverse effects of deprivation on babies of this age.

There is, however, a further point—the time limit within which the provision of mothering can make good some at least of the damage done by deprivation in these early months. The comparative success of many babies adopted between six and nine months who have spent their first half-year in conditions of deprivation makes it virtually certain that, for many babies at least, provided they receive good mothering in time, the effects of early damage can be greatly reduced. What Goldfarb's work demonstrates without any doubt is that such mothering is almost useless if delayed until after the age of  $2\frac{1}{2}$  years. In actual fact this upper age limit for most babies is probably before 12 months. But the probable existence of a safety limit should not give rise to complacency: the fact that it may be possible to make good some of the damage done by deprivation in the early months is no excuse for permitting it to be inflicted in the first place.

So much for the fully fledged forms of psychopathic character and the experiences which produce them, a sequence of events now widely recognized by child psychiatrists. Ever since Levy's first paper, however, psychiatrists concerned with this problem have pointed to the existence of less gross conditions to which less severe deprivation could give rise and which are far and away more frequent. Not only are there the many partial and covert forms of psychopathic personality, including Fitzgerald's hysterics,<sup>55</sup> but many conditions of anxiety and depression almost certainly stem from deprivation experiences or have been exacerbated by them.

"Such examples", Levy<sup>91</sup> writes, "are seen in those adults whose social life represents a series of relationships with older people, every one of whom is a substitute mother. They may be single or in combination, the point being simply that the patient must, throughout life, be in contact with a person from whom the same demands are made that were thwarted in the original experience with the mother. The life pattern then becomes dependent on maintaining such relationships. When one of them is broken there is a period of depression, or a feeling that 'something is terrifically lacking', until another relationship is made. Another type of reaction is seen in the form chiefly of excessive demands made on the person who is selected to satisfy the privations of early life . . . The problem is always the same—excessive demands for food, for money, for privileges."

Not infrequently people with these troubles deny their existence by an excessive show of cheerfulness and activity—the hypomanic reaction. This is an attempt to convince themselves that God's in his heaven, all's right with the world, a state of affairs of which they are far from sure. Naturally the hypomanic method meets with some success but, based as it is on a denial,

is in constant danger of cracking and leaving its owner in a state of despair. Moreover, even while it succeeds, the press of activity and intolerance of frustration are very trying to others, while, as Bowlby<sup>26, 27</sup> and Stott<sup>137</sup> have shown, it not infrequently leads to delinquency.

Though such cases are sadly numerous, they are mercifully more accessible to psycho-analytic therapy than the severe forms. On the immense therapeutic task set by the fully fledged psychopaths all are agreed. Levy described them in 1937 as having a poor prognosis, a view endorsed by every worker since. Because of their almost complete inability to make relationships, the psychotherapist is robbed of his principal therapeutic tool : he should, of course, be skilled in the management of patients who hate him ; he has yet to learn methods of affecting for the better patients who have no feelings for him at all. The findings of Powdermaker et al.<sup>117</sup> in this regard are especially clear. Working over a period of some six years in a small home for delinquent girls between the ages of 12 and 16, therapy was given to 80 of them. Half were successes and half failures. Response to therapy was related neither to intelligence nor to heredity. Its relationship to the girls' early family experiences, however, was striking.

**TABLE X. RELATION OF THERAPEUTIC RESPONSE OF DELINQUENT GIRLS TO THEIR EARLY FAMILY EXPERIENCES (POWDERMAKER ET AL.)**

Early family experience	Effect of therapy	
	success	failure
No rejection and some constructive family tie present	25	0
Rejection by some member of the family but some constructive tie present also . . . . .	12	10
Neurotic and ambivalent relationships . . . . .	3	13
Complete rejection or no libidinal tie . . . . .	0	17
Totals . . . . .	40	40

Note : P is less than .01.

The failure in treatment of all those who had suffered rejection or had never had a libidinal tie recalls Goldfarb's remark<sup>67</sup> that he has never seen "even one example of significantly favorable response to treatment by traditional methods of child psychiatry". Bender<sup>14</sup> goes so far as to say that "once the defect is created it cannot be corrected", and recommends that methods of care should make no attempt to be therapeutic or corrective but "should be protective and should aim to foster a dependent relationship". Others are more hopeful and believe that if the child is permitted to regress to completely infantile modes of behaviour there is a chance of his developing afresh along better lines. The work of Jonsson

at the Children's Village at Skå near Stockholm is an example of a European experiment along these lines. Here the children are encouraged to become highly dependent on their house-mothers and are permitted to regress to such infantile behaviour as taking their food from a baby's feeding-bottle. This, and similar experiments in the USA, are conceived on sensible lines, though there is debate regarding the optimal degree of control which should be exercised over the children. It will be many years before the success of these methods can be judged.

The evidence available suggests that nothing but prolonged residence with an adult, with insight into the problem, skill in handling it, and unlimited time to devote to her charge, is likely to be of much avail. This is not only very expensive but could never be made available to more than a tiny fraction of cases. Far more practicable, and in the long run far cheaper, is to arrange methods of care for infants and toddlers which will prevent these conditions developing.

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## CHAPTER 5

### THEORETICAL PROBLEMS

The theoretical problems regarding personality development and its dependence on a continuous relationship with a nurturant figure during the critical period of ego and super-ego development in the early years are of the greatest interest. It would not be appropriate in this report to do more than touch on them, however, since they are very complex and by no means clearly understood. On the other hand, progress in understanding the practical issues involved is to a high degree dependent on progress in theoretical insight.

The development of the personality is a process whereby we become less and less at the mercy of our immediate environment and of its impact upon us, and more and more able to pursue our own goals, often over long periods of time, and to select and create our own environment. Such a process implies, among other things, a capacity to abstract common properties, to think in symbolic terms, and to plan ahead—all attributes of what Goldstein & Scheerer<sup>69</sup> have termed the abstract attitude. Only when this abstract attitude is developed has the individual the capacity to control his wish of the moment in the interests of his own more fundamental long-term needs. One expects the child of three, or even five, to run into the road to seek his ball—at those ages he is still largely at the mercy of the immediate situation. As he grows older, however, he is expected to take more things into account and to think ahead. By 10 or 11 he is capable of pursuing goals some months distant in time. At 16 or 18 the more developed boy or girl is able to perform prodigious feats of abstraction in time and space. Using psycho-analytic terms, this is the process whereby the individual frees himself from slavery to his instincts and the reign of the pleasure principle, and develops mental processes more adapted to the demands of reality.

The psychic machinery which we develop within ourselves to harmonize our different and often conflicting needs and to seek their satisfaction in a world realistically apprehended is our ego. Its functions are many and include appraisal of our long- and short-term needs, their arrangement in an order of priority, the inhibition of some and the acceptance of others, so that action may be purposeful and integrated instead of haphazard and self-frustrating. Because one of our foremost long-term needs is to remain on friendly and co-operative terms with others, we must keep their require-

ments firmly in the front of our minds ; and so important is this for us that we differentiate, within our ego, machinery specially designed for the purpose—our conscience or super-ego. It is evident that both ego and super-ego are absolutely dependent for their functioning on our ability to maintain the abstract attitude and it is not surprising that during infancy and early childhood these functions are either not operating at all or are doing so most imperfectly. During this phase of life, the child is therefore dependent on his mother performing them for him. She orients him in space and time, provides his environment, permits the satisfaction of some impulses, restricts others. She is his ego and his super-ego. Gradually he learns these arts himself and, as he does so, the skilled parent transfers the roles to him. This is a slow, subtle, and continuous process, beginning when he first learns to walk and feed himself and not ending completely until maturity is reached.

Ego and super-ego development are thus inextricably bound up with the child's primary human relationships ; only when these are continuous and satisfactory can his ego and super-ego develop. In dealing here with the embryology of the human mind one is struck by a similarity with the embryological development of the human body, during the course of which undifferentiated tissues respond to the influence of chemical organizers. If growth is to proceed smoothly, the tissues must be exposed to the influence of the appropriate organizer at certain critical periods. In the same way, if mental development is to proceed smoothly, it would appear to be necessary for the undifferentiated psyche to be exposed during certain critical periods to the influence of the psychic organizer—the mother. For this reason, in considering the disorders to which ego and super-ego are liable, it is imperative to have regard to the phases of development of the child's capacity for human relationships. These are many and, naturally, merge into one another. In broad outline the following are the most important :

(a) the phase during which the infant is in course of establishing a relation with a clearly identified person—his mother ; this is normally achieved by five or six months of age.

(b) The phase during which he needs her as an ever-present companion ; this usually continues until about his third birthday.

(c) The phase during which he is becoming able to maintain a relationship with her in absentia. During the fourth and fifth years such a relationship can only be maintained in favourable circumstances and for a few days or weeks at a time ; after seven or eight the relationship can be maintained, though not without strain, for periods of a year or more.

The process whereby he simultaneously develops his own ego and super-ego and the capacity to maintain relationships in absentia is variously described as a process of identification, internalization, or introjection,

since the functions of ego and super-ego are incorporated within the self in the pattern set by the parents.

The ages by which these phases are completed no doubt vary greatly from child to child in the same way that physical maturation varies. For instance, the capacity to walk matures at any time between 9 and 24 months, and it may well be that psychic maturation is equally variable. If this is so, it will be wise to be concerned in research with developmental rather than chronological age, since it seems fairly certain that the kind and degree of psychological disorder following deprivation is dependent on the phase of development the child is in at the time. In postulating this, well-established embryological principles are again followed. As Corner<sup>45</sup> states: "abnormalities are produced by attacking, at just the right time, a region in which profound growth activity is under way . . . Possible abnormalities will tend to fall into classes and types corresponding to the most critical stages and regions in development. Injuries inflicted early will in general produce widespread disturbance of growth . . . late injuries will tend on the other hand to produce local defects".

Furthermore, he notes that

"a given undifferentiated tissue can respond to an organizer only during a limited period. It must have reached a certain stage of differentiation before it can respond; and later its character becomes fixed, so that it can yield only a more limited type of response".

The period during which the child's undifferentiated psyche can respond to the influence of the maternal 'organizer' is similarly limited. Thus the evidence is fairly clear that if the first phase of development—that of establishing a relation with a clearly differentiated person—is not satisfactorily completed during the first 12 months or so, there is the greatest difficulty in making it good: the character of the psychic tissues has become fixed. (The limit for many children may well be a good deal earlier). Similarly, there appears to be a limit by which the second and third phases must be completed if further development is to proceed.

Now it is these vital growth processes which are impaired by the experience of deprivation. Clinically, it is observed that the egos and super-egos of severely deprived children are not developed—their behaviour is impulsive and uncontrolled, and they are unable to pursue long-term goals because they are the victims of the momentary whim. For them, all wishes are born equal and equally to be acted upon. Their capacity for inhibition is absent or impaired, and without this a limited, precise, and consequently efficient mode of response cannot develop. They are ineffective personalities, unable to learn from experience and consequently their own worst enemies.

The theoretical problem is to understand how deprivation produces this result. The two main approaches to its solution are Goldfarb's discoveries<sup>62</sup> regarding the impairment of abstract thinking in these patients, and the clinical findings regarding their inability to identify or introject. Each approach carries us some distance, but the day has yet to come when they lead to a unified body of theory.

Goldfarb's findings in regard to the serious and specific impairment of the capacity for abstract thinking, which was present in every one of his cases, might be held to explain the failure of ego and super-ego development, since, as already remarked, this capacity is of the essence of their functioning. But even if this is so there remains the puzzle as to why deprivation should impair the capacity for abstract thinking. One possibility is that this capacity not only underlies ego functioning, but can develop only if ego functioning itself develops favourably. This will need investigation.

The failure of ego development in deprived children is perhaps more easily understood when it is considered that it is the mother who in the child's earliest years fulfils the function of his ego and super-ego. The institution children studied by Goldfarb and by Bender had never had this experience, and so had never had the opportunity of completing the first phase of development—that of establishing a relationship with a clearly identified mother-figure. All they had had was a succession of ad hoc agents each helping them in some limited way, but none providing continuity in time, which is of the essence of ego functioning. It may well be that these grossly deprived infants, never having been the continuous objects of care of a single human being, had never had the opportunity to learn the processes of abstraction and of the organization of behaviour in time and space. Certainly their grave psychical deformities are clear examples of the principle that injuries inflicted early produce widespread disturbance of growth.

In the institutional setting, moreover, there is less opportunity for the child who has learnt the processes of abstraction and mental organization to exercise them. In the family, the young child is, within limits, encouraged to express himself both socially and in play. A child of 18 months or 2 years has already become a character in the family. It is known that he enjoys certain things and dislikes others, and the family has learnt to respect his wishes. Furthermore, he is getting to know how to get his parents or his brothers and sisters to do what he wants. In this way he is learning to change his social environment to a shape more congenial to him. The same occurs in his play, where in a symbolic way he is creating and recreating new worlds for himself. Here are the exercise grounds for ego and super-ego. In any institutional setting much of this is lost ; in the less good it may all be lost. The child is not encouraged to individual activity because it is a nuisance ; it is easier if he stays put and does what he is told. Even if he strives to change his environment he fails. Toys are lacking : often the children sit inert or rock themselves for hours together. Above all, the brief intimate games which mother and baby invent to amuse themselves as an accompaniment to getting up and washing, dressing, feeding, bathing, and returning to sleep—they are all missing. In these conditions, the child has no opportunity of learning and practising functions which are as basic to living as walking and talking.

The case of the child who has a good relation with his mother for a year or two and then suffers deprivation may be rather different. He has passed through the first phase of social development, that of establishing a relationship, and the trauma affects the second phase in which, though ego and super-ego development is proceeding apace, the child's awareness of his relative lack of skill in these matters is reflected in his limpet-like attachment to his mother, to whom he constantly looks for help. Only if she is with him or near at hand can he manage his environment and manage himself. If he is suddenly removed from her, to hospital or institution, he is faced with tasks which he feels to be impossible. In a traumatic situation of this kind it is usual for such skill as has already been learnt to be lost. There is usually a regression to primitive functioning and increased difficulty in learning afresh. This well-known principle of the theory of learning may account for the regression to and fixation of those children at primitive modes of thinking and behaviour, and their seeming inability to progress to more mature methods.

A further principle of the theory of learning is that an individual cannot learn a skill unless he has a friendly feeling towards his teacher, and is ready to identify himself with her and to incorporate her (or some part of her) into himself. Now this positive attitude towards his mother is either lacking in the deprived child or, if present, is mixed with keen resentment. How early in a child's life deprivation causes a specifically hostile attitude is debatable, but it is certainly evident for all to see in the second year. No observation is more common than that of the child separated for a few weeks or months during the second, third, and fourth years failing to recognize his mother on reunion. It seems probable that this is sometimes a true failure to recognize, based on a regression in the capacity to abstract and identify. At others, it is certain that it is a refusal to recognize, since the children, instead of treating their parents as though they were strangers, are deliberate in their avoidance of them. The parents have become hated people. This hostility is variously expressed. It may take the form of tempers and violence; in older children it may be expressed verbally. All who have treated such children are familiar with the violence of their fantasies against the parents whom they feel have deserted them. Such an attitude is not only incompatible with their desire for love and security, and results in acute conflict, anxiety, and depression, but is clearly inimical to their future social learning. So far from idolizing their parents and wishing to become like them, one side of them hates them and wishes to avoid having anything to do with them. This is the dynamic of aggressively delinquent behaviour and may also be the dynamic of suicide, which is the result of the same conflict fought out between different systems within the self.

In other cases the child has suffered so much pain through making relationships and having them interrupted that he is reluctant ever again



to give his heart to anyone for fear of its being broken. And not only his own heart : he is afraid too, to break the heart of new persons whom he might love because he might also vent his anger on them. Older children are sometimes aware of this and will remark to a therapist : " We had better not become too familiar, for I am afraid I shall get hostile with you then " (quoted by Tibout<sup>141</sup>). It is feelings such as these which underlie the withdrawal response. To withdraw from human contact is to avoid further frustration and to avoid the intense depression which human beings experience as a result of hating the person whom they most dearly love and need. Withdrawal is thus felt to be the better of two bad alternatives. Unfortunately, it proves to be a blind alley for no further development is then possible ; progress in human relations necessitates the individual taking the other road, in which he learns to tolerate his ambivalent feelings and to bear the anxiety and depression which go with them. But experience shows that once a person has taken refuge in the relative painlessness of withdrawal he is reluctant to change course and to risk the turmoil of feeling and misery which attempting relationships brings with it. As a result his capacity to make affectionate relationships and to identify with loved people becomes inhibited and any treatment offered is resisted. Thenceforward he becomes a lone wolf, pursuing his ends irrespective of others. But his desire for love, repressed though it is, persists, resulting in behaviour such as promiscuity and the stealing of other people's possessions. Feelings of revenge also smoulder on, leading to other antisocial acts, sometimes of a very violent character.

Deprivation after the age of three or four, namely in the third phase, does not have the same destructive effect on ego and super-ego development and on the ability for abstract thinking. It still results, however, in excessive desires for affection and excessive impulses for revenge, which cause acute internal conflict and unhappiness and very unfavourable social attitudes.

In both the second and third phases the child's restricted sense of time and his tendency to misapprehend a situation add greatly to his difficulties. It is exceedingly difficult for grown-ups to remember that the young child's grasp of time is meagre. The child of three can recall the events of a few days ago and anticipate those of a day or two hence. Notions such as last week or last month, next week or next month are incomprehensible. Even for a child of five or six, weeks are immensely long and months almost timeless. This very restricted time-span has to be understood if the despair which the young child feels at being left alone in a strange place is to be fully realized. Though to his mother it may seem not only a finite but relatively brief time, to him it is eternity. It is this inability to imagine a time of deliverance which, together with the sense of his helplessness, accounts for the overwhelming nature of his anxiety and despair. Perhaps the nearest to it the grown-up can conceive is to imagine being committed to prison on an indeterminate sentence.

This analogy is apt, since the notion of punishment is itself not far from many a child's mind as the explanation of events. All clinicians have come across children who have seriously believed that their being sent away from home was to punish them for being naughty, a misconception which is often made even more terrifying and distressing by being unexpressed. At other times children imagine that it has been their fault that the home has been broken up. Commonly there is bewilderment and perplexity regarding the course of events, which leads the child to be unable to accept and respond to his new environment and the new people caring for him. Naturally a child who has suffered gross privation in early infancy, or who for other reasons cannot make relationships, will not be affected in these ways, but will greet each change with the genial indifference apparent in Levy's case already quoted. But for the child who has had the opportunity to make relationships it is not so easy to change loyalties. Indeed, very many of the problems which arise as a result of moving an older child to a foster-home are caused by the failure to recognize the deep attachment which a child has for his parents, even if they are exceedingly bad and have given him little affection. Unless these perplexities are cleared up and these loyalties respected, the child will remain anchored in an unsatisfactory past, endlessly trying to find his mother and refusing to adapt to the new situation and make the best of it. This results in a dissatisfied restless character unable to make either himself or anyone else happy.

By and large, then, the theoretical framework of developmental phases of ego functioning and of capacity to make object relationships, and of the periods within the life cycle by which they must be completed, seems to fit the clinical evidence. No doubt as understanding increases the three main phases described here will be subdivided into many subphases, and one will learn to discern the particular psychic forces which are brought into play by deprivation in each of them.

In this brief sketch no attempt has been made to go into detail nor to compare and discuss the views of the many psycho-analysts and psychologists who have contributed to our understanding. Those familiar with the literature will know where the writer's debts lie.

## CHAPTER 6

### RESEARCH INTO EFFECTS OF DEPRIVATION

It is now demonstrated that maternal care in infancy and early childhood is essential for mental health. This is a discovery comparable in magnitude to that of the role of vitamins in physical health, and of far-reaching significance for programmes of preventive mental hygiene. On this new understanding social measures of great consequence for the future will be based. These measures will only be wisely planned, however, if knowledge of what is essential and what is not is progressively increased.

Not only is further research in the field necessary to guide immediate preventive measures, but it promises also to cast light on some of the fundamental problems of personality development, on the understanding of which all the social sciences depend. Personality growth is the result of an interaction between the growing organism and other human beings. In some way the organism assimilates features of its social environment, and in so doing grows increasingly like its culture medium, though it is ever an unique synthesis of the social material of which it is made. How this process of psychic assimilation proceeds is not understood. Deprivation in infancy and early childhood is an experience which deranges it to a severe degree, and in the history of medicine it has often been the study of gross dysfunction which has most clearly illuminated the nature of the function itself. It may well be that in studying these grave derangements of the assimilatory process a clearer light will be thrown on this central process of personality growth.

Whether research in this field is undertaken with a view to promoting better preventive measures or greater fundamental understanding, henceforward it should be regarded as unnecessary to spend time demonstrating the validity of the general proposition respecting the adverse effects of deprivation. Instead, the research worker should be encouraged to move on, both to the study of basic processes and to the identification and unravelling of the effects of the many variables operating. Though aware of some of them—age and emotional development of the child, length of deprivation, degree of deprivation, relations with mother-figure before and after deprivation—there are, no doubt, some of which we are still ignorant. Matters of immediate practical significance on which information is needed are the lengths of the safety margin (*a*) during which deprivation can, if absolutely necessary, be permitted, and (*b*) within which there is

time to make good damage already done. On the theoretical side, as the previous chapter has shown, investigators are still far from clear on the principles of psychic metabolism, without which their mode of action cannot be understood. Working hypotheses, however, can be erected and these should be elaborated in some detail so that clear formulations are made which can be tested. There is no place for systematic research unguided by explicit hypotheses.

In addition to the problems of theoretical clarification, there are immense problems of execution. In the first place, it is not possible cold-bloodedly to arrange for children to be deprived of mothering at various ages and for various periods. To a high degree the investigator is dependent on experiments of opportunity, in which groups of children who for one reason or another are being or have been subject to this experience are discovered and studied. Ideally, to isolate the effects of deprivation, all other factors known to be emotionally disturbing would be absent from the cases. Thus the ideal sample would consist of healthy children of good parentage, who, so long as they were with their mothers, would have enjoyed good relationships with them. The reason for separation, moreover, would not be traumatic in itself, while the conditions obtaining during separation would be carefully regulated. In practice few of these ideal research conditions hold. Deprived children are often sick and many are born of unstable or defective parents. Family relationships while they last leave much to be desired and the home is commonly broken because of destitution, neglect, or death. Many of the children are illegitimate and unwanted. Psychological conditions in institutions or foster-homes cannot easily be arranged to suit the research worker.

A further major difficulty is that of access. Detailed studies of infants in their homes and of their relations to their mothers require a degree of intimate contact not easily attained by the professional observer. Even when these infants are in institutions, the susceptibilities of the workers who are caring for them may impede objective study. Finally, parents who are anxious and guilty about their children's later behaviour may resent further inquiry.

There are no simple ways round these difficulties. Samples can be more carefully selected than has sometimes been the case in the past, however. Now that so much is understood regarding the theory of small samples, the large heterogeneous sample with many gaps in its data must be regarded as a thing of the past. No amount of statistical analysis will remedy data which are inadequate and inaccurate. The small, homogeneous, and carefully matched samples of the kind studied by Goldfarb are far more likely to give unequivocal answers. Each sample can then be selected from all the deprived children available to conform to some extent to certain defined criteria. It will be possible, for instance, to avoid children of bad heredity or those who have had unhappy experiences in their homes. The age at

which a child first experiences deprivation can be held constant, though it may be necessary to wait some time before finding sufficient cases to fulfil these criteria and to cover all age-groups. To regulate the child's experiences while in an institution is more difficult, though, in the main, it will be possible to select places where insightful attempts are being made to provide substitute care and others where such attempts are not being made. Other variables difficult to control are the length of time the child is in an institution and what happens to him afterwards. Suffice it to say that only planned investigations of large numbers of very carefully selected cases are likely to unravel the influences of all these variables.

The problem of access, to permit the observation of relevant data, is present in all psychological studies of human beings which are not content with superficial description and, instead, seek to understand motivation, since people habitually hide many of their feelings especially those about which they are anxious and guilty. The only key yet found to unlock these secrets is the therapeutic approach, in which the research worker holds himself in readiness to help his subjects should they wish it. Naturally many will not respond, but others, sensing that the research worker is ready to aid them as well as to study them, will give him opportunities for both.

Fortunately, the problems both of sampling and of access are absent if we use animals as our experimental subjects, as Liddell is doing. At present he is studying goats, but it might be that dogs would be more rewarding subjects, since much of a practical kind is already known about their social development. For instance, it is a commonplace that a sporting dog must be trained by one master who must feed him himself, and that there are difficulties of transfer to a new master. Starting with the knowledge already available, it should be relatively easy to construct a series of experiments and perhaps gain insights which could then be tested with human beings.

A research team working on these problems, whether with animals or humans and preferably with both, needs to be equipped with many different techniques of observation, since each technique, whatever its value, has strict limitations. Only by ensuring that data derived from one source are complemented by data derived from others is all the necessary information likely to be obtained. It is especially important to combine the experimental, the psychometric, and the clinical approaches, since each can give indispensable data not provided by the others. In the past there has been a deplorable tendency for the experimentalist to despise the clinician's lack of precision and the clinician to reciprocate with contempt for the experimentalist's lack of insight into human nature. Each has stoutly maintained that his own method was the one true way to knowledge. These claims are absurd: each method is indispensable. It is the clinician who usually has the earliest insights, defines the problem, and formulates the first hypotheses. By the

detailed minute study of the feelings and motivations of his patients, and the complicated intellectual and emotional repercussions to which they give rise, the clinical worker provides information regarding the relations of psychic and environmental forces which can be obtained in no other way. This is the first sketch-map, which, though erroneous in many particulars, gives an invaluable overall picture of the new territory. (In elucidating the adverse effects of maternal deprivation it is no accident that psycho-analysts and clinical workers closely associated with them played a leading part.) The clinician is rarely in a position, however, or scientifically qualified, to test the hypotheses he has advanced : the next step must be done in more-controlled conditions by those with other skills. The planned experimental and psychometric study of statistically significant samples of subjects gives information regarding the validity of hypotheses which no amount of clinical work can give. Similarly, systematic work will in its turn lead to hypotheses, some of which can be profitably studied in a clinical setting before plans to verify them are elaborated. This combination of clinical and experimental techniques, in which work of each kind is designed to complement and promote work of the other, is the way to future progress. But it means that each type of worker must learn to understand the merits of the others' skills and the limitations of his own. Surveys and experimental work must be planned and executed using all the insight the clinician can supply. Equally, the clinician must select for study just those cases which the statistically trained worker indicates are likely to give most understanding of the problems selected for study, and must also concern himself with the recording and reliability of data, which has not been his strongest point in the past. Only by working together in a common team will the experimental psychologist, the statistician, the psycho-analyst, the psychometrist, and those with other trainings learn to respect each other and to mobilize to the greatest advantage all the skills available.

In addition to utilizing all the psychological techniques, there is good reason to include techniques of physiological measurement. The probable value of the Wetzel Grid has already been noted. Electro-encephalographic studies may also be of great interest. For instance, it is known that there is a similarity in the (abnormal) electro-encephalograms of aggressive psychopathic adolescents and those of normal young children between the ages of three and five. Though it is commonly assumed that these abnormal cerebral rhythms are due to a physical factor, as for instance genetic defect or birth injury, there are no data to support such an assumption and they may prove to be psychogenic in origin and in the nature of a fixation at an earlier level of functioning. If further inquiries proved this to be the case, a valuable link would have been made between psychopathology and neuro-physiology.

Clearly then here, in the embryology of personality, is a field rich and ripe for research and one to be exploited to the full before increasingly

effective preventive measures have robbed the research worker of his clinical material. The growth of an individual proceeds by differentiation "from large diffuse unfocused responses to goal determined, limited, precise and consequently efficient modes of response" (Goldfarb<sup>62</sup>). In his search for clearer understanding and more precisely adapted action, the scientist proceeds similarly, moving from the perception of certain general and gross relationships to a finer and finer appreciation of the nature of the forces at work and of their influence on each other. In the field of mental health and its relation to parental care investigators have so far done no more than perceive the gross relationships. It is for workers in the coming half-century to refine perceptions, to elucidate complexities, and to give the power to prevent mental illness.

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