

UNIVERSITY OF LONDON INSTITUTE OF EDUCATION

**ADOLESCENT DEVELOPMENT FOLLOWING INSTITUTIONAL CARE
IN THE EARLY YEARS**

Thesis submitted for the
degree of PhD

JILL HODGES

ADOLESCENT DEVELOPMENT FOLLOWING INSTITUTIONAL CARE
IN THE EARLY YEARS.

JILL HODGES

ABSTRACT

This thesis reports the development in mid-adolescence of a group of children raised in institutions until at least 2 years of age, then adopted or restored to a biological parent. These children were previously followed up at four and a half and at eight years of age. They were compared with a group of individually matched adolescents who had never been in institutional care.

IQ depended largely on the type of family placement, and did not appear to be adversely affected by institutionalisation, at least so long as this did not extend beyond age four and a half. The experience of multiple changing caregivers during the period of institutionalisation did not necessarily prevent the children from forming strong and lasting attachment relationships to parents once placed in families, but this too depended on family environment, being much more common in adoptive families.

However, some long-term effects of early institutionalisation were apparent. Ex-institutional adolescents showed more behaviour and emotional difficulties than matched comparisons, according to teacher questionnaires and interviews with the adolescents and their parents. They also showed greater orientation towards adult attention, and had more difficulties with peers and fewer close or confiding peer relationships than comparison adolescents, again indicating some long term effects of early institutional experience.

TABLE OF CONTENTS

	Page
ABSTRACT	2
TABLE OF CONTENTS	3
LIST OF TABLES AND FIGURES	7
ACKNOWLEDGEMENTS	9
<u>CHAPTER 1: Psychological research on children in</u>	
<u>children in institutions prior to the 1950's</u>	11
1.1 Provision for foundlings	11
1.2 Psychologists and institutionalised infants.	14
1.3 The influence of psychoanalytic thought.	20
1.4 Longer-term effects of institutional care.	24
1.5 Summary.	29
<u>CHAPTER 2: Research findings on children in</u>	
<u>institutions after Bowlby's report, and</u>	
<u>new conceptualisations.</u>	32
2.1 The W.H.O. publication "Maternal Care and	
Mental Health".	32
2.2 Institutional retardation and the stimulus	
deprivation theory.	35
2.3 The particular importance of early	
experience.	43
2.4 Models of mechanisms for long-term effects	
of early experience.	49
2.5 Summary.	56
<u>CHAPTER 3: Background and aims of the study.</u>	58
3.1 The nursery environment.	58
3.2 Development at two years old.	62
3.3 Development at four and a half years old.	63
3.4 Development at 8 years old.	65
3.5 Implications in terms of earlier research,	
and questions for further study.	68

<u>CHAPTER 4: Sample, comparison groups and method of study.</u>	72
4.1 The research hypotheses and the measures used.	72
4.2 Description of measures.	75
4.3 Assessment procedures.	77
4.4 Structure of the study.	78
4.5 Ex-institutional and institutional groups.	79
4.6 Numbers of ex-institutional and institutional children seen at age 16.	82
4.7. Children with one or both black biological parents.	82
4.8 Stability of types of placement between 8 and 16.	83
4.9 Effects of attrition and changes in placement groups upon characteristics of sample.	84
4.10 Comparison groups.	84
<u>CHAPTER 5: IQ and school attainments.</u>	88
5.1 Comparison of group mean WAIS scores.	88
5.2 Changes in group mean IQ scores.	89
5.3 Children adopted after age four and a half.	90
5.4 Social class.	93
5.5 Relationship between WAIS score and behaviour difficulty.	93
5.6 Relationship between WAIS and attachment to parents.	94
5.7 Academic attainments.	94
5.8 Summary.	95
<u>CHAPTER 6: Behaviour difficulties at home and at school</u>	96
6.1 Adjustment according to the interview with the parents; the PIPS scores.	96
6.2 Further information from the parents; Rutter "A" scale scores.	99

6.3	Relationship between "A" scale and PIPS problem scores.	100
6.4	Relationship between problem scores at 8 and at 16 years old.	101
6.5	Adjustment according to the interview with the adolescent; the AIPS scores.	101
6.6	Relationship between AIPS scores and information from parents and teachers. at 8 and 16 years.	103
6.7	Information from teachers; the Rutter "B" scale.	103
6.8	Relationships between problem scores based on parents and teachers accounts at 8 and 16.	106
6.9	Relationship between "B" scale scores at 8 and 16.	106
6.10	Differences between groups on specific items.	106
6.11	Summary.	108
<u>CHAPTER 7: Social and family relationships.</u>		110
7.1	Attachment to parents.	110
7.2	Sibling relationships.	114
7.3	Showing affection.	115
7.4	Similarity and assimilation.	117
7.5	Confiding and support.	118
7.6	Disagreements over control and discipline.	121
7.7	Involvement in the family.	123
7.8	Peer relationships; overall ratings.	125
7.9	Specific difficulties with peer relations.	126
7.10	Special friends.	128
7.11	Confiding in peers.	130
7.12	Relationships between attachment and peer relations.	131
7.13	Relationships between current and earlier peer relations.	132
7.14	Overfriendly behaviour.	132
7.15	Relationships to teachers.	134

7.16 An ex-institutional "syndrome"?	134
7.17 Summary.	136
<u>CHAPTER 8: Discussion.</u>	137
8.1 Introduction	137
8.2 Longterm effects of early institutionalisation upon IQ and academic attainment.	138
8.3 Effects of different types of family placement on IQ.	142
8.4 The question of an age-based sensitive period for IQ gains.	143
8.5 Longterm effects of institutional care on behavioural and emotional problems, and the effects of different family placements.	148
8.6 Longterm effects of early institutional care on family relationships and attachments.	153
8.7 Influence of different types of family placement on family relationships and attachments.	153
8.8 Relationships to peers and to adults outside the family.	156
8.9 Limitations of the study.	166
8.10 Issues for further research.	167
<u>APPENDIX 1: The critique of Skeels (1966) by Longstreth and Clarke and Clarke.</u>	169
<u>APPENDIX 2: The parents interview schedule.</u>	178
<u>APPENDIX 3 Construction of Parents Interview Problem Score and Adolescents Interview Problem Score.</u>	214
<u>APPENDIX 4 The adolescents interview schedule.</u>	216
<u>APPENDIX 5 The Questionnaire on Social Difficulty (Lindsay and Lindsay, 1982).</u>	261
<u>APPENDIX 6 The Teachers Questionnaire.</u>	266
<u>REFERENCES</u>	268

LIST OF TABLES AND FIGURES.

(Figures, marked Figure below, are numbered in sequence with tables.)

	Page	
Figure 4.1	Structure of the study.	78
5.1	Group mean IQ scores at 8 years and at 16 years.	88
Figure 5.2	Trends in IQ scores for children placed before four and a half years.	90
5.3	IQ changes in children placed in adoptive or quasi-adoptive foster homes after age four and a half.	91
5.4	Changes in IQ score between pre- placement and last post-placement test in 9 children adopted after age 4 and a half, by occupational classi- fication of adoptive parents.	92
Figure 5.5	CSE and GCE "O" level achievements.	94
6.1	PIPS scores (Problem scores based on interview with parents) by group.	97
6.2	Contact with police and psychiatric or psychological referral.	98
6.3	"A" scale scores.	99
6.4	"A" scale "Neurotic" subscores.	100
6.5	"A" scale "Antisocial" subscores.	100
6.6	AIPS scores (Problem scores based on interview with adolescents) by group.	102
6.7	"B" scale mean scores by group.	104
6.8	Number of adolescents scoring above cut-off point on "B" scale, by group.	105
6.9	"B" scale items which had differentiated the groups from school comparisons at 8.	107
6.10	"B" scale items newly differentiating ex- institutional adolescents from comparisons at 16.	108
Figure 7.1	Attachment to mother at 8 and 16 years.	111

7.2	Relationships with siblings.	115
7.3	Adolescent's physical affection to parents.	115
7.4	Mother's physical affection to adolescent.	116
7.5	Father's physical affection to adolescent.	117
7.6	Issues relating to closeness with parent, confiding and support.	119
7.7	Parent's views; who would the adolescent confide in if feeling miserable?	120
7.8	Adolescent's views; who would they confide in?	121
7.9	Disagreements over adolescents' activities.	122
7.10	Adolescents' involvement in family activities (Parent's interview).	123
7.11	Going out with parents (Adolescent's interview).	124
7.12	Teacher's assessment of popularity with peers.	126
Figure 7.13	Number of adolescents with same-sex special friend.	129
7.14	Relationship between indiscriminate over- friendliness towards adults at 8 and selectivity towards peers at 16.	133
7.15	Number of "ex-institutional" characteristics.	135

ACKNOWLEDGEMENTS

This research depended on the help and co-operation of the adolescents involved, their parents and teachers, and the residential and social workers involved in the care of some of them. In addition, other staff of Barnardo's, the Church of England Children's Society, and a number of local authorities were generous with their help.

I am also most grateful to the Joseph Rowntree Memorial Trust and the Research Fund of the Institute of Education, whose funding made the project possible.

This research was done part-time, and I am very appreciative of the role which the Thomas Coram Research Unit played as a base offering continuity, stimulation and support; I am particularly grateful for the help and welcome still extended even after I ceased to be formally based there. I want to thank many individual people within the Unit; they include Mary Baginsky, Judith Cook, Barbara Reid and Olwen Rowlands, who assembled and interviewed the matched comparison group, a travail which can only be read between the lines of section 4.10, and Sandra Stone who as project secretary played an important part in maintaining continuity and organisation. Maria Harrison has never failed to respond helpfully and immediately. Charlie Owen was an enormous help and support over all aspects of the data input and organisation, and he and Ian Plewis gave much valued help over the analysis.

Outside the Unit, there are also people whom I want to thank. Pat Radford, my District Principal Child Psychotherapist, and colleagues in my then work setting, the Brixton Child Guidance Unit, showed their encouragement and their commitment to research concerning children by helping me to arrange temporarily to reduce my sessions there, and later to take a period of leave. Without this it would have been impossible to

complete the research. George Moran and Peter Fonagy of the Anna Freud Centre gave helpful comments on parts of the draft manuscript, and Athar Hussain has helped me in many ways including the wordprocessing and printing of numerous drafts.

I am glad to be able to record here how grateful I am to my supervisor, Professor Barbara Tizard. This research would not exist had she not originated the study of these children when they were 2-year-olds. Her clarity and thoughtfulness have been models for emulation since I was first fortunate enough to work on the study when the children were eight. Her helpful discussion has meant a great deal to me at all stages of this work, and I have valued greatly her patience and availability during the writing up of these chapters.

CHAPTER 1**Psychological research on children in institutions prior to the 1950's.**

This thesis addresses the question of the longterm effects of institutional care, on children who later left the institutions for different kinds of family placement.

1.1: Provision for foundlings.

Institutions for the upbringing of young children had existed for centuries before their inmates began to interest developmental researchers. In England during the eighteenth century, the number of abandoned infants increased, partly because of the marked rise in the rate of illegitimate births in the second half of the century. But there was also a deepening economic crisis for the very poor. For near-destitute families, increasing numbers of children eroded marginal living standards still further, and so legitimate as well as illegitimate infants were left in the streets, to die or to await the care of a charitable passer-by, the parish workhouse, or a foundling hospital (Shorter, 1975; Stone, 1977, McClure, 1981). These latter two were the beginnings of institutional care for infants.

The workhouses, under the Poor Relief system, offered the infants little better chance of survival than the street. When in the 1750s and '60s Jonas Hanway examined the fate of pauper children brought up in workhouses, he found that very few survived their infancy. There were workhouses where 100% of the infants died in the years he studied, and even in "one of the best" workhouses, that of St. George's, Hanover Square, he found approximately four deaths to every survivor. A subsequent Parliamentary investigation found that only seven in a hundred children under twelve months in 1763 survived over the next two years. (Pinchbeck and Hewitt, 1969).

Such figures made the still appalling rates of infant mortality in the first English Foundling Hospital seem favourable by comparison. The Foundling Hospital was set up in 1741, by Captain Thomas Coram, and Hanway was one of the Governors. Similar hospitals already existed in Europe. The aim of the Hospital was "to prevent the frequent murders of poor miserable children at their birth, and so suppress the inhuman custom of exposing new-born infants to perils in the streets, and to take in children dropped in churchyards or in the streets, or left at night at the doors of church wardens or Overseers of the Poor" (Anon., c.1728, quoted by Stone, 1977). Besides rescuing the foundlings, the other explicit aim was to help the mother reinstate herself in society, and there were accusations that the Hospital encouraged immorality and promiscuity, by allowing women to rid themselves of an illegitimate child. The number of children brought always outstripped the places available; in the first year, the Hospital took in more children than planned, and fifty-six children died out of the hundred and thirty-six received.

High though this proportion is, infant mortality was high in society as a whole. Early in 1758, the Governors of the hospital proudly compared its overall rate of 45-52% with the 59% of under-tuos whose deaths were recorded in the Bills of Mortality (McClure 1981). But a much higher death-toll ensued when in 1756 the Foundling Hospital was thrown open to take children from the whole country, in return for Government subsidy. Once the news of the General Reception spread, the hospital was inundated with three to four thousand infants every year, "collected in baskets from all over the country by itinerant baby transporters, who dumped the contents, dead, dying or half alive, on the doorsteps of the hospital" (Stone, 1977). Workhouse authorities often forced mothers in their wards to part with their children, since sending them to the Foundling Hospital relieved the parish authorities of the expense of keeping them. The proportion coming from outside the London parishes multiplied fourfold from its previous 12

per cent. Two-thirds of the children died, out of the fifteen thousand dumped there in the first four years of the new regulations, despite the establishment of subsidiary hospitals in the countryside and the system of boarding the children out with cottagers. In the 27 months between June 1758 and September 1760, the mortality rate rose to 81 per cent. (Rodgers, 1949; Pinchbeck and Hewitt, 1969; MacClure, 1981).

There were different sources of concern for these infants; political and patriotic, economic, religious, charitable and sentimental. First, from the point of view of the state itself, the foundling homes were a reservoir of potential manpower (Donzelot, 1977). They were a matter of concern because their phenomenally high rates of infant mortality meant a waste of resources, of subjects needed for the forces, for colonisation, and for production. (Thomas Coram himself was a trustee for the settlement of Georgia; Jonas Hanway formed the Marine Society to draft pauper and vagrant boys into the Navy, short of men in time of war.)

From the point of view of the overseers of the workhouses, the concern was to make pauper children into adults who were self-supporting instead of a permanent drain on parish resources. They therefore had to be trained in habits of regular work and discipline. (Oxley, 1974). This need sat somewhat uneasily with the belief that they should not rise above their humble station in life; the necessary provision of education and resources, however minimal, was frequently opposed on the grounds that it privileged pauper children over those of more deserving parents, or might allow the pauper child, by virtue of superior training, to occupy a position which his betters might otherwise have filled. (Pinchbeck and Hewitt, 1973).

As this suggests, on the part of religious and charitable institutions, beside humanitarian feelings there was often a

concern that children should accept and gratefully fulfil their humble allotted role. In the words of Fanny Burney, writing about the resistance which met her father's earlier suggestion that the children of the Foundling Hospital be taught music, the children were to be "trained up to useful purposes, with a singleness that would ward off all ambition for what was higher, and teach them to repay the benefit of their support by cheerful labour. To stimulate them to superior views might mar the religious object of the charity, which was to nullify rather than to encourage all disposition to pride, vice or voluptuousness, such as probably had demoralised their culpable parents" (Rodgers, 1949). There is an indication here too of the view that illegitimacy itself was culpable. Even a century and more later, the condemnation of illegitimacy "was apt to extend not only to the sin but to the sinner, even to the next generation." (Young and Ashton, 1956); in 1946 the Curtis report noted that many Childrens Homes were named after saints "though perhaps for this purpose there could be a better choice than the "Magdalen Home", which we found more than once" (HMSO 1946) - a remnant of the Magdalene homes for mothers of illegitimate children.

All these concerns with the survival of institutional infants, or even with their upbringing as future productive and well-behaved citizens, are essentially concerns with the cost borne by society. Similar concerns for the social cost still do exist; but they are concerns in a different register from a concern with the effects of institutional life on the individual child's development, and historically they predated it.

1.2. Psychologists and institutionalised infants.

Yet it was not child welfare considerations which first interested psychologists in institutionalised infants. Sears, the director of the Iowa Child Welfare Research Station from which Skeels and Skodak carried out their studies in the 1930s

and 40s, took stock of child psychology as American psychologists regrouped after the Second World War. He described how having outgrown its 'anecdotal stage' around 1920, child psychology entered on its 'topographic stage'; the child, as a human whose psychological properties were largely unknown, was a natural subject for inclusion as psychologists charted the behavioural potentialities of cats, rats, dogs and humans, often focusing on the development of isolated functions and in restricted experimental conditions. (Sears, 1947).

Maturational questions, especially of motor development and learning, were a major influence governing child psychology; which abilities would appear with maturation regardless of experience - like walking, despite the child having been swaddled or tied to a cradle-board in the preceding months - and which abilities required specific training? Gesell (1929) argued that "the physiological processes of maturation ...determine in such large measure the form and the sequence of infant behaviour patterns, that the infant as an individual is reasonably secure against extreme conditioning, whether favourable or unfavourable".

One method of investigating such issues was by giving one child training or stimulation while a comparison child received none. Twin studies (eg. Gesell (1929), McGraw (1933)) trained one twin in particular skills from early infancy while giving the other as little handling and stimulation as possible. McGraw's "experimental baby could, when less than a year old, ...swim effectively under water" and what is more "could exercise equilibratory and locomotor control on roller skates"; whereas when the control twin was confronted with these tasks his performance was, perhaps understandably, interfered with by his "extreme caution". But such studies illustrated in particular the force of the "developmental gradient"; they seemed to show that less esoteric abilities would appear when the child was ready, and

were unaffected by training. Dennis (1941) reared two infant girls (twins, though this is incidental) up to the age of 7 months in what were described as "conditions of restricted practice and minimal social stimulation", aiming not to originate or train any new piece of behaviour. Despite these conditions, 154 new "responses" were recorded during the experiment, and Dennis concluded that "it appears that practically all the behaviour of the first year of life is autogenous." (The term autogenous was coined by Dennis to extend the concept of instinctive or maturational behaviour to include responses which are at least partly learned, but under self-imposed practice.) "The diary account of development gives an impression of behaviour as extensive, as varied, and as typically human as does a biography of an infant reared under normal home conditions" (p.180).

The message of such studies appeared to be that the unfolding of early abilities depended on maturation and individual endowment much more than on environmental circumstances. "From the studies, it appeared (especially as there was a tendency to generalise beyond the types of activity usually studied) that it really mattered very little what one did in the course of the first year, since development, by and large, would take care of itself." (Stone, 1954). Essentially, the issues related back to the old one of predeterminism, or nature and nurture (Stone, 1954; Hunt, 1979). Infants who developed slowly or unsatisfactorily did so, by this account, not because of environmental factors but because their inherited constitution or endowment was inferior; and the rate of unfolding of their early abilities was taken as an indicator of the rate of later development.

As an alternative to such experimental studies, institutions offered a "natural" population of children receiving relatively little stimulation. It is worth noting that because of the belief that infant development was evidence of the unfolding of inherited potential, it was seen as good practice

to keep infants awaiting adoption in institutions for a long period, the better to assess their fitness for adoption or to "match" them to the adoptive parents. This was especially so where information about the child's history was unavailable or unfavourable. For some children, this meant several years of observation, generally in an orphanage since foster homes were scarce (Skeels, 1966).

Overall, such institutions offered little opportunity for play or stimulation, and interactions with adults were largely limited to physical care, often en bloc. Infants were isolated from each other and their contact with adults kept to the necessary minimum, partly because of the risk of epidemic infection in those days before antibiotics. However, the lack of close intimate contact with adults was not only enforced by medical necessity, but in some ways conformed to the mental-hygienist approach to child-rearing which was becoming influential at the time, taking over aspects of the influence which the earlier religious morality had exerted. Describing these changing influences, Newson and Newson (1974) provide a vivid and chilling account of the hygienist advice given to parents; in 1928, for example, Watson pronounced "There is a sensible way of treating children. Treat them as though they were young adults... Let your behaviour always be objective and kindly firm. Never hug and kiss them, never let them sit in your lap. If you must, kiss them once in the forehead when they say good night.... Try it out. In a week's time you will find how easy it is to be perfectly objective with your child and at the same time kindly. You will be utterly ashamed of the mawkish, sentimental way you have been handling it". (Newson and Newson, 1974, p.61). The impersonal behaviour of the institution staff, the timetable-bound attention to children's physical needs, probably approached closer to the hygienist ideal than many parents could bring themselves to do.

Among the very earliest of these studies of institutional children were those of Ripin (1933), Levy (1937), and Durfee and Wolf, (1933, reported in Bowlby, 1951). Ripin and Levy both compared infants below the age of one year, living in institutions, with infants living in their own homes of low socio-economic status (Ripin), or foster-homes (Levy); these comparisons evidently aimed to control for the effects of "nature", or endowment. Both used Gesell and similar scales and found the institution children performing worse than children in families. Durfee and Wolf studied children in a number of institutions, but instead of comparing them to family-reared children, correlated the developmental quotients with the amount of maternal care the children received, finding increasing difficulties after the age of three months.

Other work showed that such effects could be at least partly reversed, in that children who moved from a poor and understimulating institution, to another institution where they received more personal care, showed a marked rise in IQ (Skeels and Dye, 1939). The study involved 13 experimental children, moved at a mean age of 19 months, when they had a mean IQ of 64. In the women's wards of the mental subnormality institution to which they moved, they were usually the only small child on the ward, and received a great deal of individual attention, affection and stimulation from older inmates. Usually one particular patient, or attendant, developed an especially close relationship with the child. After a stay averaging 19 months, their mean average IQ had increased by 27.5, and none showed a fall in IQ. A contrast group who had remained in the original institution and not been placed for adoption, with an initial mean IQ of 86.7, showed a mean IQ decline almost as great (- 26.2), with only one child out of 12 whose IQ did not fall. On follow-up, approximately 2 to 4 years later, most of the experimental children had been adopted while the contrast children, apart from two brief failed adoption placements, had remained in

various forms of institutional care. Some of these offered much more stimulation than the original institution, and marked IQ gains were observed. Overall, each group's mean IQ showed a small rise, producing a final IQ for the experimental group of 95.9 and for the contrast group of 66.1 (Skeels, 1942). A follow-up into adulthood (Skeels, 1966) showed that the marked difference between the groups was maintained.

There have been critiques of the methods and conclusions of this study. The most important general criticism is the one made by Clarke and Clarke (1976) and Clarke (1982), to the effect that the marked difference between the groups in adulthood was "marginally due to the early life experiences and massively due to the later prolonged period of security in permanent homes" (Clarke, 1982, p.64). Although the title of his 1966 monograph indeed lays the emphasis on early life experiences, Skeels' own interpretation of his results does acknowledge the issue raised by Clarke and Clarke; he makes it quite clear that he sees the adoptive environment as contributing to the better performance of the experimental group in the first and adult follow-up figures respectively (pages 24 and 56). He specifically points out the subsequent losses in the two experimental-group children who were not adopted. Some further criticisms made by Clarke and Clarke are addressed in Appendix 1 together with those made by another author, Longstreth (1981). The Clarkes correct emphasis on the importance of the later experience of the children in Skeels' study in determining their eventual outcome and IQ did not deny that the intervention produced changes at the time - only that these, without additional later experience, would have an impact on outcome. In contrast, Longstreth's critique, in the tradition of earlier hereditarian criticism of the earlier work of the Iowa school (see McNemar, below), attempted to show that "there is simply no compelling evidence" for the gains of the experimental group nor for the decline in scores of the contrast group, and that the study "offers no convincing support for the

malleability of early IQ". For numerous reasons given in Appendix 1, this conclusion appears unwarranted.

The studies at Iowa reported by Skeels and his colleagues also included a study of the effect of a nursery-school programme on children in an understimulating institution, (Skeels, Updegraff, Wellman and Williams, 1938), and follow-up studies of children placed in adoptive homes in infancy or later (Skeels, 1936,1938; Skodak, 1939; Skodak and Skeels, 1945; Skeels and Harms, 1948). These studies challenged the concept of intelligence as a fixed individual characteristic, related to parental genetic traits but relatively uninfluenced by the environment; a challenge which did not go uncontested. McNemar (1940) argued that the Iowa evidence in fact supported a hereditarian viewpoint, basing this view largely on assumptions about the intelligence of the biological parents - an argument promptly rebutted in detail in favour of environmentalism by the Iowa authors (Wellman et al 1940). In Britain, Bodman found poorer social adjustment in older institutionalised and previously-institutionalised children, and similarly argued that the poorer adjustment of the "average institution child" was due to inherited defects in social capacity, endorsing Doll's view that social maturity was largely innate, and distributed like intelligence. (Just as Goddard's Kallikak family trees purportedly showed the heritability of intelligence and character, so Doll constructed four-generation genealogies in which some families showed above-average social maturity while in others social maturity never reached a "normal" level). (Bodman, 1950; Bodman et al, 1950).

1.3: The influence of psychoanalytic thought.

These studies of early institutional experience, and especially those focusing on the effect of personal or maternal care as opposed to opportunity for stimulation and learning, point towards another strand of psychological

thought. Besides the child psychology centred around motor development and learning, there was a second child psychology in the field by the 1940's, which took the contrary view that early experiences could be of great importance for development. This was a child psychology based around psychoanalytic concepts, with some support from cultural anthropologists studying childrearing patterns in other cultures. For this psychoanalytically-influenced child psychology, studies of children in institutions demonstrated the role played by individualised "mothering" in the child's development, and the impact of its loss or insufficiency (Freud and Burlingham, 1943).

Spitz (1945) reviewed a number of earlier studies and reported the enormous contrast between children whose first year of life was spent in a foundling home in conditions of extreme perceptual and social deprivation, and children who though also institutionalised, were cared for by their mothers, and were the focus of their intense emotion and attention. The former group showed extreme developmental retardation, and also abnormal reactions to strangers at around 9 months, while the latter group developed normally. Spitz argued that the important factor for the first group was not their perceptual or motor deprivation itself, but the isolation of the children from any mothering figure; that it was via the development of emotional interaction with such a figure that the child learned to play, to gain perceptual experience of the environment, and to explore it motorically. On follow-up two years later, despite moving to a more stimulating setting at fifteen months of age, those children still in the institutions had fallen still further behind developmental norms, and their heights and weights were very much below normal. Morbidity and mortality were strikingly high (Spitz, 1946A). These infants were initially with their mother or a wetnurse, and separated permanently after the third month, usually in the sixth. Spitz (1946B) compared them to infants studied in another setting where for some children the

separation from the mother was followed by the onset of weepiness, followed by withdrawal, a decline in the developmental quotient, and other symptoms; all of which were rapidly reversed when the mother was reunited with the child after two to three months of absence.

Spitz's work, particularly his films, had considerable impact, though its reception was far from uniformly sympathetic. Fraiberg (1983) states that when the studies of hospitalism and anaclitic depression appeared they were greeted in psychological circles with disbelief that deprivation of mothering could produce enduring effects on an infant's psychological development. Stone (1954), then president of the New York State Psychological Association, described how in the mid-1940's "it was with a great sense of discovery and of the opening of vistas that ...I came upon Rene Spitz's exciting studies", and remarked on the "soul-searing" impact of the films, but also on the "critical and suspicious comments that psychologists make to me informally about this work". Pinneau noted that Spitz's work and emphasis on maternal deprivation was becoming influential, and mounted another attack; he had already demolished Ribble's (1944) ill-founded physiological rationale for the importance of mothering in infancy, and with it dismissed the importance of mothering per se (Pinneau, 1950). This new critique took issue with numerous aspects of Spitz's presentation of the data, and also the validity of the Hetzer-Wolf test used by Spitz (Pinneau 1955). Though Spitz rebutted some of Pinneau's criticisms, he replied mainly by restating his conclusions; "1. That affective interchange is paramount, not only for the development of emotion itself in infants, but also for the maturation and the development of the child, both physical and behavioural. 2. That this affective interchange is provided by the reciprocity between the mother (or her substitute) and the child. 3. That depriving the child of this interchange is a serious, and in extreme cases, a dangerous handicap for its development in every sector of the personality" (Spitz 1955,

p.454). These formulations are especially interesting in their foreshadowing of the later emphasis on mother-child interaction and reciprocity, rather than a one-way process of mother-to-child care or stimulation.

By this time, however, Spitz's findings had already found practical, as well as theoretical, recognition. By the time that Bowlby's influential World Health Organisation report appeared, in 1951, Spitz's films had led many states in the USA to replace institutional care for infants with foster-home care (Hunt, 1979); and some adoption agencies were beginning to permit the adoption of infants as early as possible, rather than continuing their earlier policy of prolonged monitoring for "normal" development - a monitoring under conditions now seen as more likely to encourage abnormality than to safeguard against it (Stone,1954).

In Britain, similar concerns were expressed about the quality of institutional care for children. The Curtis report (H.M.S.O. 1948) investigated institutional care in Britain, and found a widespread shortage of appropriate staff (and administratively chaotic organisation of childcare under public assistance, workhouses, charities etc). The report noted that "the result in many Homes was a lack of personal interest in and affection for the children which we found shocking"..and gave numerous examples of depriving and inappropriate care, and anecdotal observations of the effects upon the children. For example, "..some of us saw with distress thirty toddlers at a convent home who were being cared for by a woman of very low mentality, who had been a girl in the Home and was then 28 and incapable of working outside. These children rushed at us, pulled, petted, clung and felt our clothes and other possessions"... Shortly after the Curtis Report appeared, Schmideberg (1948) published a strong critique of the damaging and inhumane conditions of many institutions. She also claimed that inspectors were often intentionally misled by staff as to the real conditions and

relationships within the home; one of many examples being an institution where lip-service was paid to individual attention and where "the matron always makes a point of emphasising that each nurse has got her 'special' baby", but where closer familiarity reveals that "the "special baby" varied from week to week! The staff is too overworked to give them individual attention." A psychoanalyst herself, she pointed to long-term effects of institutional upbringing upon mental health.

1.4: Longer-term effects of institutional care.

Besides studies of the immediate effects of institutional care upon infants, there were a number of studies, more systematic than Schmideberg's, of the longer-term sequelae of such care. A basic issue concerned whether the effects of this early experience were reversible in a subsequent more adequate environment, or whether later experience could not entirely undo them. Researchers were also interested in delineating which areas of development appeared to be affected. Lowrey (1940), one of the first, studied 28 children, all but one admitted to infants homes before 11 months of age, and boarded out in foster homes between the ages of 2 years 11 months and 4 years. Details of the environment of the infants home were not given, but it was characterised as lacking in "the highly personal socialising stimuli" for development present in a family environment.

The children were described as showing symptoms of "inadequate personality development, chiefly related to an inability to give or receive affection", which Lowrey relates to the one common factor in their lives, the time spent in the infants home. Aggressive or antisocial behaviour and a number of other symptoms were also common. In contrast, three children who were initially brought up in families, before staying for some months in the infants homes, did not show these characteristics. Lowrey concluded that "infants reared in institutions undergo an isolation type of experience, with

resulting isolation type of personality" and that before placement in a family they should as it were be weaned from the institution by a period of "living in a small group, intimately in contact with warm adults who are genuinely interested in their charges..", a recommendation which is revealing in regard to the deficits of the infants homes.

A major series of studies was carried out by Goldfarb, systematically investigating the question of long-term effects. Like Lowrey, he found early institutional care related to poor foster home adjustment. He compared 40 fosterchildren aged 6 - 10, who had always lived in families, with 40 who had entered institutions at an average age of four months, and remained there until being placed in their first foster family at an average age of three years and three months. The ex-institutional group were found to show more problem behaviour, including restlessness and distractibility, aggression, and inability to form meaningful emotional relationships. Their peer relationships were poorer, they were more often attentionseeking towards adults, more fearful in making new adjustments and meeting new people, and showed more antisocial behaviour. 42.5% were seen as maladjusted at school compared to 15% of the "family" children (Goldfarb 1943a).

A subsequent study found similarly that "aggressive, hyperactive behaviour", "bizarre, disorganised, unreflective behaviour" and "emotional unresponsiveness" were common in 6-8 year old foster children who had spent their early years in institutions, unlike those who had always lived in foster families, and indicated that this tended to lead to more fostering breakdowns in the former group (Goldfarb 1944). Goldfarb also noted that speech difficulties, school difficulties, and mental retardation were all more common among the ex-institutional children.

How long could these effects of early institutionalisation last? Goldfarb (1943b) pursued this question by studying a somewhat older group, consisting of 15 children aged between 10 and 14, who had entered institutions in very early infancy (mean age 4.5 months), remained there for about three years, and then entered foster homes. This ex-institutional group was compared with 15 "family" foster children who had lived with their own families before entering foster homes when aged between one and 21 months (mean age 14 months).

Differences between the ex-institutional group and the "family" group were striking. The ex-institutional group had a mean full scale IQ of 72, with no child achieving a score above 90, ie within the average range or above; the "family" group mean was 95, and 40% scored above 90. The ex-institutional group scored below the "family" group on tests of concept formation. A comparison of personality characteristics on the basis of observation during the testing did not find group differences in friendliness, restlessness, or prevalence of nervous habits, but found the ex-institutional group more fearful and apprehensive and less responsive to approval or sympathy. 87% of the ex-institutional children were rated by their caseworkers as emotionally 'removed', withdrawn in their contacts with people; while although a few of the "family" children were felt to be slow and fearful in making relationships, all were seen as able to form deep and lasting ties. The caseworkers rated 60% of the ex-institutional group as showing marked emotional difficulties or severe problem behaviour, compared to 13% of the "family" children. Ex-institution children were significantly more likely to show the following problems; unpopularity with peers, restless hyperactive behaviour, inability to concentrate, poor school adjustment, excessive craving for affection, sensitivity and fearfulness. These problem areas were like those found in the study of younger children (Goldfarb 1943a). The ex-institutional children's school attainments were poorer, they were less socially

mature, and their speech was poorer than the "family" children.

Discussing these findings, Goldfarb saw the children's inability to form deep relationships as underlying many of their other difficulties, and related this inability to their early years in the institutions "when strong anchors to specific adults were not established". The personality distortions caused by early deprivation continued, he maintained, despite the long subsequent family experience; "if anything there is a growing inaccessibility to change".

Despite the prevalence of maladjustment in ex-institutional foster children, not all were maladjusted, and Goldfarb (1947) subsequently examined what factors might contribute to these differences in outcome. 15 well-adjusted adolescents were compared with 15 who were severely maladjusted. Adolescents in each group were matched for sex and for age, the mean age of each group being approximately fourteen and a half years, ranging between twelve and a half and sixteen and a half. All were now fostered, having been reared in one baby institution until foster placement at around age 3. The institutional setting lacked "warm, affectionate, continuous contact between child and the specific adult parent-person"; indeed, to prevent epidemic illness, infants were kept in complete social isolation for the first nine months, their only human contact being with nurses during the "few hurried moments" required for physical caregiving. The subsequent two years offered little enrichment of this extremely depriving experience.

Most of the well-adjusted adolescents had been well-adjusted during the first six months of foster-home placement, and most of the poorly-adjusted adolescents had been poorly-adjusted in this period. Goldfarb found no indication that this was related to post-institutional factors, such as the degree of warmth and affection offered by the first foster parents, almost all of whom appeared warm and demonstratively

affectionate, or the degree of interest shown by the biological parents, most of whom were uninvolved. Nor was it related to to the degree of demonstrable pathology (psychosis, mental defect or delinquency) in the biological mothers.

Goldfarb therefore investigated whether there were differences during the period of institutionalisation itself which were related to the differences in adjustment. Poorly adjusted children had entered the institution at a younger age (average six months as compared to average eleven months for the well-adjusted group); more of the poorly adjusted children had entered the institution below the age of six months; and they had spent an average of 34 months in the institution as compared to an average of 25 months for the well-adjusted group. Thus both age at entry and the length of stay in the institution were related to adjustment in adolescence.

How unchangeable were the effects? Goldfarb was pessimistic about the possibilities for change or treatment once the effects of such deprivation had taken their hold on the child's personality. Others, like Orlansky (1949), argued for the importance of later experience in reshaping aspects of the personality. Some evidence was provided by Beres and Obers (1950), who followed up individuals from the same institution studied by Goldfarb, but at a later point than the young adolescents he studied. The study included 38 adolescents and young adults, ranging in age between 16 and 26. As infants, they had been placed in institutional care at ages ranging from a few weeks old to 23 months, and remained for an average of about 3 years. The children were then placed in a foster home, (often the first of many), virtually all between the ages of two and a half and four and a half. Some later attended residential schools, and most were then referred back to their biological families, or discharged, between age 16 to 18. Because there were many variable factors in each child's history, and a lack of detailed developmental information,

Beres and Obers presented their data in the form of a clinical classification and description, rather than statistically. Although the selection of the group studied weights it toward pathology, Beres and Obers judged about half their cases to have made "some degree of favourable social adjustment" by late adolescence, a finding at variance with the view of Goldfarb and others that the psychological effects of extreme deprivation in early infancy are permanent or unmodifiable by subsequent experience. The most important modifying factor, Beres and Obers believed, was "the opportunity for the development of a close stable relationship to an adult person, whether in a placement situation, a casework relationship, or in psychotherapy."

A similar finding and conclusion was later reported by Heston and co-workers (1966) who studied adults (ages 21 - 50) who had been placed in foundling homes at birth and spent between 3 months and 5-plus years there (mean length of stay was 2 years.) These adults did not differ from controls on the IQ, personality, mental health and social adjustment measures used, despite the fact that half the institutional group had been born to schizophrenic mothers. Heston notes that "the factor most clearly related to the reversal of the effects of institutional care as seen in the subjects of this report is the corrective experience of family living, which for some persons was their own marriage".

In 1951 the World Health Organisation published a report, written by the British child psychiatrist John Bowlby, which included a review of much of the research on children in institutions in its scope. Bowlby's "Maternal Care and Mental Health" played such an important role that it seems appropriate to consider it as the beginning of a new chapter.

1.5: Summary.

This chapter first outlines the kinds of concern which existed over the upbringing of young children in institutions in the

eighteenth century, when foundling hospitals were first established. Besides their religious or charitable motivation, these were concerns at a societal rather than an individual level. When psychologists first began to interest themselves in institutionalised infants, it was for quite different reasons related to a dominant theoretical issue in the psychology of the time; the institutions provided a setting in which questions of maturational effects in motor development and learning could be investigated in a population with very little stimulation compared to infants in a normal home setting. Maturationist theories reflected the belief that the rate of development of the child's early abilities indicated the unfolding of inherited potential, and was relatively unaffected by environment. This view was challenged by findings that children in institutions performed worse than those in families, and in particular by studies showing that the rate of development improved with more stimulation, even within the institution. By the 1940s, the influence of psychoanalytic thought upon psychology led to another kind of interest in these children. Besides lacking stimulation, they lacked an individualised one-to-one reciprocal relationship with a mother figure; this psychoanalytically influenced approach viewed the latter as critical for their development. Studies showed both developmental retardation and abnormal social development in institutionalised infants, and longer-term sequelae in children who had subsequently been placed in family settings. These sequelae appeared to include poor intellectual and language development, fearfulness, poor peer relationships, difficulty in making close relationships, restlessness and distractability, and aggressive or antisocial behaviour. Earlier entry and longer stay in the institution was associated with poorer adjustment in adolescence. However, other research also suggested that later experience, in particular involving family or other close relationships, could modify these ill effects of early institutionalisation. The role of the lack of a close caregiving relationship, as

distinct from a lack of experience and stimulation within institution, remained for investigation, as did the issue of whether there were permanent effects or whether later experience could overcome or modify them - and if so, what kinds of experience.

Chapter 2 Research findings on children in institutions after Bowlby's report, and new conceptualisations,

2.1: The W.H.O. publication "Maternal care and Mental Health",

In his report for the World Health Organisation, Bowlby (1951) summarised a great deal of the literature from the USA, several European countries, Scandinavia and Great Britain, concerning the ill effects of institutional upbringing and various other disruptions in caregiving upon young children. He reported a high degree of agreement between the child care workers to whom he spoke in different countries concerning the fundamentals of child mental health, and stated in summary that "what is believed to be essential for mental health is that an 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" (Bowlby, 1951). "Maternal deprivation", the absence of such a relationship, might take more or less severe forms, but much of the work concerned the longterm consequences of severe deprivation. Such deprivation might involve any of the following alternatives;

- "a) Lack of any opportunity for forming an attachment to a mother-figure during the first three years...
- b) Deprivation for a limited period - at least three months and probably more than six - during the first three or four years...
- c) Changes from one mother-figure to another during the same period..." (Bowlby, 1951, p.47).

Bowlby's review of the research suggested that these different experiences apparently had very similar consequences. These included cognitive effects; delayed language development, lowered IQ, an impairment of the ability for abstract thinking

- and also effects on personality and behaviour; a shallowness of emotional response, and inability to make deep relationships with others, aggressiveness and distractibility, and antisocial behaviour - the "affectionless and psychopathic character". Bowlby, and some of the researchers whose studies he reviewed, saw the inability to make deep emotional relationships as the central feature from which other difficulties arose.

However, Bowlby also emphasised that if looked at in detail, the outcomes of these different experiences were themselves likely to reveal differences. The exact nature of the child's experience was important; institutional care, for instance, was not uniform, but many research studies lacked systematic information about what the institutionalised child or infant actually experienced. The age at which the child experienced the deprivation, its duration, and what preceded and followed it, could also be expected to affect development. Subsequent research did explore some of these issues further, and will be reviewed in what follows.

There were strong challenges to some of the "maternal deprivation" claims (Yarrow, 1961), although it is interesting to note en passant that the terms of the debate had shifted to the extent that hereditarian counter-arguments no longer took a major role. Two among the various strands of criticism are of most relevance here. The first is the argument that it was perceptual or stimulus deprivation, and not a lack of mothering or emotional experience which produced the ill-effects of institutionalisation. The second is the argument that early experience does not have the extreme importance attributed to it and could be wholly or substantially overcome by subsequent experience.

As Hunt (1979) emphasised, several streams of investigation developed concerning the importance of early experience for later behaviour. He identified the first, which denied that

early experience had any important effect, with two forms of investigation. One, described earlier, was based on the theory that behavioural development is determined by maturation which in turn is predetermined by heredity; the other concerned instincts as unlearned patterns of behaviour, as in neonatal reflexes, or the emergence of flying in newly hatched birds. Another stream of investigation he saw as emerging from the work of Hebb (1949), emphasising the importance in early learning of the development of sensorimotor organisations, and suggesting that adult learning was heavily loaded with transfer effects from earlier experience. Hunt saw another stream of investigation as emerging from psychoanalysis, and a fourth from ethology; these are mentioned further below.

The issue of the effects of certain kinds of stimulation on cognitive development, and the issue of early experience, acquired a high profile in child psychology, with the period of development of preschool compensatory education programmes and Head Start in the USA, and somewhat similarly the Plowden report (HMSO 1967) in England. For instance, in reviewing current thinking and research at a UNESCO conference on "Deprivation and Disadvantage" in 1967, Passow and Elliott (1970) stated that one characteristic of disadvantaged children was the presence of "perceptual deficiencies, problems of visual and auditory discrimination and spatial organisation". Hunt's (1961) synthesis of the work of Piaget and others had provided the rationale for nursery and prekindergarten programmes of compensatory education, and early intervention through parent training. Bloom's (1964) book "Stability and Change in Human Characteristics" was important for many of these educators in underscoring early experience and environment as crucially important for growth and development. Bloom advanced the view that environmental variation had its greatest effect on any trait during the period when that trait changed most rapidly according to its characteristic growth curve; though the technique of

calculating the latter has since been strongly challenged (see Clarke and Clarke, 1976), cognitive psychologists and educationalists took up this claim in relation to the development of intelligence and cognitive skills. The emphasis in education shifted to children in early childhood; and cognitive psychologists investigated the skills and stimulus preferences of younger and younger infants. Rather paradoxically, given that the cognitivists were contesting the psychoanalytically - derived theory of maternal deprivation, popular psychology viewed them as setting out to establish in the cognitive sphere what psychoanalysis had already recognised in the emotional one, namely the critical importance of early experience; Pines (1966) called it 'intellectual Freudianism'.

The two questions outlined above, of deprivation of stimulation and of the privileged role of early experience, will now be reviewed in more detail.

2.2: Institutional retardation and the stimulus deprivation theory.

Reviewing Bowlby's evidence, O'Connor (1956) saw the W.H.O. monograph as offering two distinct themes, one being that a continuous uninterrupted relation with one person was important for character formation, and the other that environmental stimulation was important for the development of abilities as well as character. In this section the major emphasis will be on the latter question, and primarily on intellectual development.

In a reassessment of the maternal deprivation issue, Ainsworth (1962) took up this question, suggesting that before six months of age perceptual deprivation was in any case equivalent to insufficient maternal care, while in older children, retardation seemed more effectively prevented by facilitating the child's attachment to a substitute mother

than by enriching the environment. Arguing on the contrary that "the human organism does not need maternal love in order to function normally" Casler (1968) provided a mirror image of the view that in early infancy perceptual and "social" stimulation were equivalent. He cited Rheingold's (1956) study of the social reinforcement of vocalisation in infants, claiming that "the 'social reinforcement' involved only visual, auditory and tactile stimulation simple enough in nature so that it could have been administered mechanically." (Casler, 1968,p.612). Brossard and Decarie (1971) attempted a separation of the two, and showed that 2-month-old institutionalised infants made equal Griffiths gains from perceptual non-social stimulation (mobiles, recorded sounds) and social stimulation (holding, playing, smiling, singing, talking, but no toys) provided for 15 minutes per day over a ten week period. But in slightly older infants, of 5 months, Yarrow and co-workers (1972) showed that development was affected differently by inanimate and by social stimulation. However, even post-infancy, Casler argued that the evidence of human isolation studies showed that perceptual needs probably took priority over social needs. Other evidence reviewed in this section suggests that this dichotomy is not particularly appropriate in the process of development, especially early development.

Subsequent to Bowlby's review of research in his WHO report, several studies gave further evidence that depriving institutions adversely affected children's intellectual development. Dennis and Najarian (1957) studied foundlings in a Beirut institution and took the view that the severe retardation found in the first year spontaneously reversed, despite no change in the setting, by the age of four and a half to six. However, measures were restricted to various performance tests, specifically excluding language as well as social functioning, and thus apparently missed key areas; as other studies of institutional children had shown (Goldfarb,1945a; Pringle and Bossio, 1960), institutional

children's performance scale scores were nearly normal, but their language scores were very retarded. Dennis (1960), in a further study, found considerable developmental retardation, and linked specific aspects of motor retardation with fewer available learning opportunities, while regarding emotional factors as unlikely to be relevant. Dennis had earlier argued for the "autogenous" nature of much early development, but his work now emphasised the need for an environment which could at least support this development. The conditions of "restricted practice and minimal social stimulation" under which he had reared the experimental twins may have been restricted in relation to ordinary family experience (though perhaps to no great extent, as Stone (1954) and others noted). But they were very much better than the environment of a Beirut orphanage. Language and social behaviour, in any case, could hardly be expected to develop in an "autogenous" manner.

Experiments in environmental enrichment showed that extra stimulation indeed accelerated aspects of the development of institutionalised infants. White and Held (1966) found that visually directed reaching appeared considerably earlier when these infants were handled more in the first month and subsequently given more visually interesting environments than their white-lined hospital cribs, and more opportunity for movement. In most studies, in the course of receiving extra perceptual and motor stimulation, the infants were inevitably given more social stimulation. Sayegh and Dennis (1965) showed that the Cattell scores of the Beirut orphanage children could be improved by giving them experience of handling objects and encouraging their very delayed capacity to sit upright, one hour a day for fifteen days. Hakimi-Minesh and co-workers (1984) studied infants aged 4 - 13 months in an Iranian orphanage, where there was very little staff-child interaction and where except during feeding, changing, or 3x per week bathing, infants spent all their time in individual cribs which were covered all around. Pre-intervention testing with the Bayley gave a motor development index of around 60

and a psychomotor development index around 85-90. For a six-week period half the infants received "tactile, auditory and visual stimulation and interpersonal communication" for five minutes a day, five days per week. Despite its minimal level, this intervention improved their Bayley scores, relative to matched comparisons without such stimulation, whose average score declined; and some effects were still evident at six month follow-up.

Rheingold (1956) investigated the effect of substituting herself as "mother" in caring for groups of four institutional babies, from the sixth to the eighth month, comparing them with groups cared for under the usual institution routine of care en bloc by many changing caregivers. Precautions against the spread of infection meant that, as was normal practice at the time, caregivers wore gowns and scrubbed up between handling babies, and babies were not put with each other in a playpen, or on the floor. The experimental infants thus received more attentive individual care for seven and a half hours a day, and from one individual rather than a number of different persons, but no special training. The main focus of the study was the social behaviour of the infants, and they became more responsive to their experimental "mother" almost at once, and gradually more responsive to others too. However, they did not test reliably better than the control infants in postural, "adaptive" or "intellectual" development. They left the institutions after an average stay of nine months. On follow-up a year later, in foster homes or their own families, no significant differences were found in social responsiveness or developmental progress between the groups, except that more experimental children vocalised during the social tests. The whole group was of normal intelligence and apparently satisfactorily adjusted. It was noted as a positive feature that they seemed to be more friendly to strangers than children who had always lived in their own homes. The authors emphasised that in no way did these children resemble the disturbed and retarded children described in other studies of

institutionalised children, and point to the need to clarify the dimensions of deprivation; the age of the child, the nature and duration of the deprivation, and the experiences prior and subsequent to it (Rheingold and Bayley, 1959).

Institutions like those studied by Spitz were clearly still to be found, though these later studies came up to forty years after; and experimental stimulation clearly had effects. But most institutions in developed countries were not of this type, and studies of the development of children in these more adequately stimulating institutions showed that their intellectual development was much less impaired than that of children in grossly depriving settings. Klackenberg (1956) contrasted the adequate development of one-year-olds in 8 Swedish institutions with Spitz's findings. These institutions had one staff member to every 2-3 children, as compared to Spitz's ratio of 1 to 7-8; and in general one nurse was responsible for "her" children throughout their time in the institution, and "emotional pleasure" for both sides in the relationship was apparently expected, although no detailed data on attachment are given. However, despite their adequate development, the institution infants still scored lower than children fostered in the same families from one month old, and showed more emotional disturbance and insecure behaviour during testing.

Similar findings were reported by Tizard and her co-workers (Tizard and Joseph, 1970; Tizard and Tizard, 1971). They studied British residential nurseries in which there was a high staff-child ratio, good physical care, and generous provision of toys, books and outings. These factors were combined with multiple and changing caregivers who -unlike the setting described by Klackenberg - were discouraged from forming close relationships with the children. At age 24 months, the 30 children studied had a mean Cattell score corresponding to 22 months, with delay mainly evident in language development, often noted to be an area of particular

vulnerability (Ainsworth, 1962; Skuse, 1984). As in Klackenberg's study, the children differed from family-reared children in their social and attachment behaviour. By age four and a half, the language retardation had disappeared; the children were spoken to more often as they got older, and their range of experiences was broader. Tizard, Cooperman, Joseph and Tizard (1972) showed that language scores were related to differences in their verbal environment in the institution, but that both these factors were related to differences in the way the nurseries were organised. The authors suggest that the crucial variable in determining the quality of adult talk and response towards the children was staff autonomy; "if assigned a limited role, staff tend to behave in a limited way", much of their talk to children being of very restricted kinds and unlikely to evoke a verbal response. These studies are described in more detail in Chapter 3.

The general implication is that environmental understimulation played a large part in the grave intellectual retardation found in children from poor institutions; and also that it is extremely difficult in early childhood to treat "social" stimulation as separate from perceptual and cognitive stimulation, which includes language. However, general "social stimulation" is not identical with a close longterm attachment. Earlier researchers, including Spitz, saw the loss or absence of such an attachment as the basis of the retardation, but it is clear that the absence of close attachments did not necessarily lead to marked retardation if the institution was adequately stimulating.

Though the children were not retarded on standard measures, they were not necessarily performing optimally. The institutional children in both Klackenberg's and Tizard's studies showed impaired performance when compared to children reared in families, whether their family of origin or since infancy in a foster family. Further, there is evidence that

even children in good quality, stimulating institutions benefit cognitively, as well as socially, from a longterm close specific relationship. Saltz (1973) studied children between 16 months and 6 years, in institutions already offering good intellectual, physical and social stimulation. Children who experienced "mothering" from paid foster grandparents (4 hours per day, 5 days per week), showed significantly greater intellectual gains on retesting a year later than controls matched for initial IQ, age at initial testing, and length of time in the institution.

This may be because cognitive stimulation tends to be very much intertwined with close human relationships, particularly in young children; and linguistic stimulation still more so. Even in non-institutional 4-year-olds, older and more autonomous than infants, Tizard and Hughes (1984) noted how nursery school staff, less familiar with the children and their lives than were mothers, were correspondingly less able than the mothers to communicate with the children and to help them understand and elaborate experience. Younger children are still more dependent upon adults whose familiarity with them can help the adult respond in a way attuned to their communications and interest (Stern 1985). Clarke-Stewart (1973) studied interactions between mothers and their children between nine and eighteen months, and found the children's overall competence highly significantly related to maternal care. Concerning the latter, Clarke-Stewart observes "One complex factor subsumed all measures of "optimal" maternal care; expression of affection, social stimulation, contingent responsiveness, acceptance of the child's behaviour, stimulation and effectiveness with materials, and appropriateness of maternal behaviour for the child's age and ability". The study suggests that from around fifteen months of age responsive verbal stimulation appears to be the main influence on the infant's mental development; a conclusion which underlines that it is probably not useful to attempt to

separate "perceptual" from "social" stimulation as the stimulus deprivation hypothesis required.

Adequate development requires adequate stimulation, but optimal development requires that it be adjusted to the child's individual needs; and an adult who has an enduring affectionate relationship with a child is most likely to be sensitively aware of those developmental needs at a particular time. In contrast to those earlier workers who attempted to define the needed stimulation in impersonal, if not "mechanical", terms, later discussions of what makes for good early environmental stimulation have leaned much more towards relationships and the transactional roles of the child and caregiver (e.g. Pilling 1978, Skuse 1984). Tizard (1986) indeed suggested that Bowlby had underemphasised the role of attachments in learning.

The evidence is limited regarding long-term effects of an earlier lack of stimulation once the environment has improved. Dennis (1973) studied Lebanese foundlings brought up in a grossly depriving institution for the first 6 years of their life (described in more detail in chapter 3). The mean IQ of both sexes, after the first year, was just over 50. After this age, boys moved to an institution which offered a greatly improved setting, with a good deal of contact with the world outside the institution, stimulation, academic and training input, and friendly contact. Their mean IQ at 16 was around 80. Girls moved to a very different setting, like a custodial institution, isolated from the outside world, where much of their time was spent on menial domestic work; their mean IQ at 16 and later was around 50, and no individual reached a score of 100; they also showed an extreme degree of social handicap. Considerable, though not complete, recovery had thus been shown by the boys after placement at 6 in a more stimulating setting. Dennis also examined the outcome when policy changed and foundlings were placed for adoption during the first two years of life. Given this earlier change of setting, and the

move to an adoptive family rather than a better institution, their subsequent postadoptive mean IQ was around 100, approximately 20 points higher than the boys who aged 6 had entered a stimulating institutional setting; suggesting that experiential deprivation occurring before the age of 2 years "does not have lasting intellectual consequences if followed by normal everyday cognitive experience" (p.110); but that effects might be found if deprivation continued longer.

Rutter's review in 1981 concluded that perceptual restrictions or poverty of stimulation appeared to have long-term effects on cognition, but less so on emotional development. The mechanisms of such effects may be various (Rutter 1989). A child's early retardation may produce longterm effects on cognition and attainment, not directly but because of the chain of subsequent decisions about the child's education and placement, or because the child elicits different responses than does a non-delayed child. One example of such mediating mechanisms appears in the study by Hakimi-Manesh and co-workers (1984). Of their original 28 institutionalised infants, seven were lost to six-months follow-up because they had been adopted, taken back by their family, or transferred (presumably to a more favourable environment). All but one of these children were from the group which had received extra stimulation, and it seems likely that their improved performance determined the change of placement. Skeels' (1966) follow-up of young institutionalised children into adulthood also gives clear examples of this mechanism. The question of long-term effects on other areas of development is considered further below.

2.3: The particular importance of early experience.

The idea that early experience is of particular significance in development has a long history (Clarke and Clarke, 1976), despite its often being identified with the relatively recent discipline of psychoanalysis. However, as described above, it

was via psychoanalysis that it had its impact upon developmental psychology and child care, in contrast to Gesellian views of maturation. Orlansky (1949), reviewing evidence that later influences could indeed alter the course of development, first praised "the importance of childhood experience to the formation of personality" as "one of the great findings of psychoanalysis". He argued though that psychoanalysis attributed too much importance to traumatic early events (indeed, the psychoanalysis of the day placed much more weight on concepts such as fixation to early trauma than subsequent psychoanalytic thinking).

Ethology, as well as psychoanalysis, also contributed to the model of age-based "critical" or at the least "sensitive" periods in social development and attachment behaviour (Bowlby, 1969; Hinde, 1963). For example, filial imprinting in birds was shown to occur within a particular sensitive period, although the onset of this period might depend on external as well as internal factors. Although the idea of similar "critical periods" in human development had a period of popularity, subsequent researchers contested its applicability to humans (Clarke and Clarke, 1976; Sameroff, 1975). However, a more recent review of the evidence relating specifically to social development concluded that long-term effects of early experience variables were to be found in studies of humans as well as animals, and that there was evidence of age differences in the relative susceptibility to environmental influences during development (MacDonald, 1985). More detailed consideration is given to this model in the next section.

Most relevant here is the considerable criticism of the claim that in humans maternal deprivation during infancy led to permanent damage. Goldfarb, Bowlby and other researchers argued that various experiences grouped under the term "maternal deprivation" were linked to deficits and distortions in later functioning, and that this damage once done in the early years was resistant to change even if the environment

improved. Yarrow (1961) concluded that evidence for long-term effects of separation was tenuous, based on a few studies where there was inadequate information about the early history; and similarly that the few relevant pieces of research into multiple mothering (in kibbutzim and Home Management Houses in university home economics departments) suggested that multiple mothering per se was not necessarily damaging to the child. Yarrow noted that the long-term effects of the latter had not yet been evaluated, and Cadoret and Cain (1980) subsequently found that placement in a Home Management House was associated with antisocial behaviour in adolescence; see section 2.4 below.

Bowlby and his co-workers themselves modified some of their earlier views, only a few years after the WHO report. Bowlby, Ainsworth, Boston and Rosenbluth (1956) followed up 60 children (ages 6-13) hospitalised in a TB sanitarium for various periods before age 4, finding a better and more varied outcome than expected and concluding that the case for the damaging results of maternal deprivation resulting from separation had sometimes been "overstated." (See also Lebovici, 1962). Recent work of Bowlby's emphasises a view of development as influenced by early experience but not determined by it if later life offers compensatory or transformative experiences (Bowlby 1988).

One may distinguish different versions of the view that early experience has a particular importance in development. There are correspondingly different forms of evidence and counter-evidence.

The extreme version is that the effects of early experience are irreversible. Evidence of recovery or rehabilitation after damaging experiences of deprivation contradicts this view; and writers both before (Orlansky, 1949) and after Bowlby's 1951 report have emphasised such evidence. O'Connor (1956), responding to Bowlby, cited rehabilitation studies such as

the Iowa studies, and Clarke and Clarke (1954), who showed IQ gains in mentally deficient patients hospitalised after removal from cruel and neglectful homes.

Clarke and Clarke (1976), in an important and influential review of the field, marshalled much evidence against the extreme statement of irreversible effects, with more of a focus on cognitive than social functioning. Among this evidence, most salient here are studies showing (1) that children who had suffered gross and extreme deprivation could improve and attain normal functioning given an appropriate environment (Davis, 1947; Koluchova, 1972, 1976); (2) that even in cases where environmental change was less extreme, such as improvement in institutional care, or a move from poor institutional care to an adoptive home, poor functioning improved if the environment improved (Skeels, 1966; Dennis and Najarian, 1957; Dennis, 1973; Kadushin, 1970); and (3) that positive effects of early experience, as well as negative ones, disappeared if the environment producing them altered; preschool intervention programmes with children from poor families produced only short-term improvement unless continued and preferably accompanied by other environmental changes.

However, although there is a great deal of evidence against the hypothesis in this extreme form, most of the very same studies can be advanced in support of less extreme forms, especially when it is social and emotional rather than cognitive development which is the criterion of damage or recovery. Less extreme forms of the hypothesis would not posit irreversibility, but would regard early experience as of fundamental importance none the less, whether within a model of declining plasticity with age (MacDonald, 1985), or within transactional models (Sroufe, 1977) which would include attachment theory and more recent psychoanalytic theory (Emde 1988). Aspects of these models are discussed below. It is worth noting that Clarke and Clarke themselves conceded that a "wedge" model probably holds - i.e. effects strongest at the

youngest end, reducing later though remaining present. Ainsworth (1962), in her reassessment of the effects of maternal deprivation, stated that certain forms of impairment appeared to be less readily or completely reversible than others, maintaining however that "prolonged and severe deprivation beginning early in the first year of life and continuing for as long as 3 years usually leads to severely adverse effects on both intellectual and personality functioning that do resist reversal" (p.153). That is, adverse effects were here described not as inevitable but as usual, and not as irreversible but as resistant to reversal.

Whatever the mechanism, there is evidence for the less extreme form of the hypothesis if functioning following damaging early deprivation remains impaired to some degree, or more than normally intense environmental measures are needed for normal functioning to be regained, or early positive intervention produces longterm effects. Such evidence is provided by a number of other studies besides some already reviewed. Thus, to take the three points from Clarke and Clarke's review listed above;

(1) Recovery from extreme deprivation. Although children reared in conditions of extreme deprivation do show recovery, it is not always as dramatic as Koluchova's twins achieved. Skuse's (1984) review of six well-documented cases, as well as Clarke and Clarke's review, indicated that some cases still had a poor outcome despite intensive efforts at rehabilitation; and data on emotional and interpersonal development are generally sketchy, so even in generally successful cases it cannot be shown that functioning was entirely normal.

(2) Improved environment leading to improvement in impaired functioning. Although adoption studies do show resilience and recovery in children placed after earlier disrupted attachments or institutional care, they also indicate

persisting effects in a substantial proportion of children. Besides the earlier studies, such as Goldfarb's, already reviewed, there are a number of others. For example, Rathbun et al (1958,1965) examined children adopted in the United States from disadvantaged early backgrounds abroad. Despite evidence of good resilience, on follow-up 28% showed disturbed or problematic adjustment. Kadushin (1970) studying a (positively selected) group of children adopted after age 5, found three-quarters of the parents satisfied with the placements, but also that the older the child at placement, the more likely an unfavourable outcome - i.e. resilience declined - and a number of children showed difficulties such as separation reactions, indiscriminate attention-seeking or being "set in their ways". Tizard and Hodges (1978) found that 8 year old children adopted from institutions after age 2 generally formed good attachments with their parents and did well in various ways, including IQ; but also showed more behaviour and peer difficulties than comparisons, especially at school. This study is discussed in more detail in Chapter 3. Lambert (1981) found that adoptive placement at a later age, with a longer prior stay in residential care, was associated with an increased likelihood of poor behaviour at school and/or home, and of reading difficulties. MacDonald (1985) points out that a study by Flint (1978) found peer relation difficulties in 15 year olds, despite up to two and a half years intensive intervention in the institutions in which the children lived, before adoption. In France, Duyme and Dumaret found that deprived children, subsequently adopted after the age of six were more likely to show retardation six years after placement than similar children adopted before the age of six (Clarke and Clarke, 1985).

(3) Later effects of early positive experience. Although early positive experience is no permanent safeguard against later difficulty, Kadushin indicated that the biological mother's attitude to the child, if warm and accepting, was positively related to outcome in later adoption, and reviewed

evidence from his own and from other studies that better outcome was associated with less exposure to pathological early environments. Regarding preschool intervention programmes, at the time of Clarke and Clarke's 1976 review the evidence suggested that the effects "washed out" quite rapidly. But subsequent follow-up has shown some long-term positive effects (Woodhead, 1985; Clarke and Clarke, 1985).

2.4: Models of mechanisms for long-term effects of early experience

Rutter (1989) has outlined a number of mediating mechanisms for long-term continuities and discontinuities: genetic mechanisms; biological substrate; shaping of environment; cognitive and social skills; self-esteem and self-efficacy; habits, cognitive sets and coping styles; and links between experiences (referred to above). Here a broader classification is made, which subsumes a number of the issues relevant to long-term effects of early institutionalisation under two main themes.

1) The model of differential plasticity with age.

The theory of age-based sensitive periods has been mentioned above. In his 1985 review of the literature on the effect of early experience on social development, MacDonald used the term "relative plasticity" as more appropriate to data, like most of those he reviewed, where there is no sharply delimited period of susceptibility to environmental influences, but rather a gradual decline in sensitivity.

MacDonald distinguished between cases where differential sensitivity to environmental stimuli is at least partly determined internally, and where control is entirely external. In the latter case there is age specificity, but not a true sensitive period or period of greater relative plasticity.

For instance the finding that parental restriction of exploration between 1 and 4 years of age, but not before or after, is negatively related to cognitive performance, may simply indicate that home restrictiveness becomes less critical with age as the child is allowed outside the home more often (Wachs and Gruen, 1982). It is assumed that there is a wide variation and species differences in the degree of internal and external control of sensitive period phenomena, and a continuum from greater to lesser environmental control. For instance, whether verbal stimulation at a particular age has any effect on development may be determined by the level of cognitive development, which may in turn have been influenced by external and internal events. In this way the differential-plasticity model comes a good deal closer to some transactional models (see below) than did earlier simpler extensions of the notion of critical periods to humans.

However it does by definition involve, as the transactional model does not, some age-based change in susceptibility to particular experience, which then has long-range effects. As regards the age of presumed particular susceptibility to "maternal deprivation", Bowlby at first (1944) related delinquent character development and the "affectionless character" to prolonged deprivation of maternal care in the first five years of life. Subsequently, reviewing the work by Spitz, Goldfarb and others in the 1951 W.H.O. report, Bowlby concluded that the critical period began from the second half of the first year and continued until about three, and others concurred. (Ainsworth (1962), Lebovici, 1962). Trasler's (1957) study would tend to support this; foster breakdowns, taken as an indication of disturbance in the capacity to accept affectionate relationships, were related to duration of institutional care within the first three years, rather than to the total time in institutional care, age at separation from family, or age at first placement. Wolkind (1974) did not examine duration of care, but found that admission to an institution before age 2 was associated with disinhibition,

but not with antisocial behaviour which was common irrespective of age at admission. Yule and Raynes (1972), however, had found little evidence that the age at which the institutional child first left his family was related to later behaviour. Wolkind, and similarly Wolkind and Rutter (1973), viewed both antisocial behaviour and entry to care as secondary to discordant family situations.

In contrast, another study suggested that a relatively short early period of extremely discontinuous care increased the likelihood of antisocial behaviour in adolescence. Cadoret and Cain (1980) used an adoption study to assess the importance of genetic and environmental factors in adolescent antisocial behaviour. Out of a total of 246 adoptees, separated from their biological parents at birth, and reared in an orphanage prior to adoption, 23 had experienced a 3 to 6 month period of discontinuous mothering as an infant. This occurred when the infant was placed in a university "Home Management House" which was attached to a home economics course as practical experience. Female students had responsibility for the care of the infant in rotation, each for five days at a stretch, and each infant thus experienced between 17 and 30 different caregivers. Among adoptees who had had this experience in infancy there was significantly more antisocial behaviour in adolescence, even when effects due to alcoholism or psychiatric disorder in the biological parents or adoptive parents and siblings, and divorce or separation of the adoptive parents, were partialled out. Boys appeared particularly vulnerable.

The finding is striking in that such a circumscribed experience of great discontinuity, combined with otherwise presumably good or adequate care, still apparently produced effects visible between ages 10 to 17. It is also noteworthy that earlier follow-up of 29 other adoptees had not found any significant effects of Home Management House placement in infancy upon cognitive functioning or personality in 8 - 17

year-olds (Gardner, Hawkes and Burchinal, 1961). Cadoret and Cain suggest that differences may not have emerged because the majority of the sample were younger children who had not passed through the age of risk for antisocial behaviour. Another group of children were followed prospectively over a five-year period; in these preschoolers no cognitive or physical effects of Home Management House placement were found, but the investigators did not examine behaviour or personality (Pease and Gardner, 1958).

Though Cadoret and Cain did not state the age at which the children were placed in the Home Management house, the study by Gardner, Hawkes and Burchinal (1961) of similar infants stated that the mean age on admission was 5 months, (range 0.5 to 14 months) and the mean length of stay 5.1 months (range 0.8 to 12 months.) It seems likely then that the experience usually fell within the first year, and certainly before the age of 2.

Another study suggests a possible lower age limit, again of six months, for vulnerability in relation to another area of social behaviour. Yarrow et al (1974) studied adopted ten-year olds, most of whom had been placed in their adoptive homes within ten days after birth, but some of whom had first been fostered. Those who had been separated from their foster-mother after six months of age, when they were assumed to have formed an attachment, were found to show less capacity for social discrimination (the capacity to establish different levels of relationships with people) than the other children. Age at separation was negatively correlated with social discrimination for boys and girls alike; social effectiveness for boys was also negatively related to age at separation. Age at separation was not related to intellectual functioning, or to overall adjustment. This suggests that disruption in continuity of a relationship after six months of age may have significant long-term effects on the capacity to establish discriminating relationships, and offers some support to

Bowlby's view that the period of vulnerability begins in the second half of the first year. (There are no data however on the possibility that those children adopted later could have been differentially selected in some way, although it is hard to envisage a basis for selection which would affect this variable but not others; or the possibility that families adopting older infants were somehow systematically different in such a way as to produce these effects.)

2) Transactional models;

In contrast to the differential-plasticity model, these do not assume that a direct effect of early experience upon the individual is the primary vehicle of long-term effects. Rather, to quote Sameroff and Chandler (1975) "the child is, in this view, in a perpetual state of active reorganisation and cannot properly be regarded as maintaining an inborn deficit as a static characteristic. In this view the constants in development are not some set of traits but rather the processes by which these traits are maintained in the transaction between organism and environment" (p.235). This represents a considerable shift in emphasis. The one-way notion of the impact of stimulation or "mothering" on the child is replaced not just by recognition of "The Effect of the Infant on its Caregiver" (Lewis and Rosenblum 1974), but of the continuing influence of each on the response of the other. The effect of early experience depends on mediating variables which sustain the process it has set in train.

Within this general "transactional" orientation, different models are to be found. One lays most emphasis on later experience and the way in which others respond to aspects of the child's behaviour. For example, Clarke and Clarke (1979) employ this model when considering Tizard and Hodges' (1978) finding that children adopted after spending their first years in institutional care, without the opportunity for close attachments, formed attachments to their adoptive parents but

continued to have difficult relationships with peers. Clarke and Clarke suggest that the adoptive parents made great efforts to foster close attachments in the children, while they did not put such efforts in helping the child to get on with peers. The peer difficulties therefore continued while the lack of attachment to a parent was generally overcome. The emphasis is therefore still primarily on the "input" to the child.

Another type of transactional model changes the emphasis, placing less stress on the ways in which others respond to the child after the experience of deprivation, and more on what "input" the child has become able to seek or elicit or how it is experienced. Sroufe (1977, 1979) emphasises that within a genuinely transactional model, the child is viewed as a creator, shaper and interpreter of experience, as well as a recipient. Later experience is also important, but it is the product of the interaction between the child and the environment; later issues are faced within the context of previous experience.

One important area within this transactional approach has been elaborated by those, including Sroufe, who have used a model based on revised psychoanalytic theory and in particular attachment theory. Attachment theory describes the construction of "internal working models" of attachment figures and of the self, in the context of the first relationships. These models are increasingly elaborated through transactions with external people and the external world. Once organised they tend to operate outside conscious awareness, and new information tends to be assimilated to existing models; so they may continue to influence how the child establishes and maintains future relationships, what sort of responses are likely to be elicited from others, and how experiences will be understood and responded to. These may all lead to the perpetuation of ways of behaving, through

self-reinforcement and reinforcement through others. (Bowlby, 1969, 1973, 1980, 1982; Bretherton, 1985).

An attachment classified as "secure" in infancy has been shown to relate, *inter alia*, to autonomy and competence of functioning in toddlerhood (Sroufe and Waters, 1977), to peer competence in 4- to 5-year olds (Lafreniere and Sroufe 1985), and to attachment-related behaviour and representation in 6-year-olds (Main, Kaplan and Cassidy 1985). The interpersonal difficulties of children who have lacked attachments through being reared in institutions are reminiscent of these findings, but the findings relate to children who have generally remained within the same environment, and it is not known whether "insecure" attachments in infancy still show similar effects in older children if the environment has subsequently changed so as to permit more secure attachments. However, Gaensbauer and Harmon (1982) studied young children fostered after removal from environments of abuse or neglect. Though showing a relatively rapid recovery in terms of attachment classification, these children still retained an underlying vulnerability, evident in response to minor stresses such as the foster-mother becoming preoccupied with family difficulties; the foster child withdrew and development suffered, whereas a child from a background of secure attachment was able to respond so as to regain the foster-mother's attention. In general, periods of stress tend to be the times when earlier-based difficulties become evident (Sroufe and Rutter, 1984), and not only in childhood; Quinton and Rutter (1988) found that women who had been reared in institutions as girls showed outcomes fairly similar to controls when social circumstances were good, but were more likely to develop disorder when circumstances were adverse.

It is worth noting that these studies imply that subsequent experience did not entirely override earlier effects, and also that findings like those of Yarrow et al (1974), described in

the previous section might plausibly be conceptualised in terms of attachment theory. This underlines the point that a transactional model of this kind may also be a model of age-based declining plasticity as described previously. In so far as any transactionally based theory suggests that underlying forms of internal organisation begin to take shape from early in life and tend to stabilise later behaviour, it will also amount to a model of "declining plasticity."

2.5: Summary.

When Bowlby (1951) reviewed much of the existing literature on the effects of institutional care and disruptions in caregiving, he put forward 'maternal deprivation' as the central issue. This term denoted the lack of a close and continuous relationship with a mother or mother substitute during the first years of life. It might take more or less severe forms, but Bowlby's survey, based not only upon institutionalisation but upon other forms of 'maternal deprivation', indicated longterm effects upon cognitive and emotional development, personality and behaviour. Following on from the psychoanalytic strand of thought (see chapter 1), Bowlby conceptualised these difficulties as deriving from an inability to make deep emotional relationships. One form of challenge to the 'maternal deprivation' hypothesis came from the argument that it was perceptual or stimulus deprivation, and not a lack of a close "mothering" relationship, which was damaging. Further research indicated that environmental understimulation did play a large part in the intellectual retardation found in children from poor institutions; but it is neither easy nor appropriate theoretically to attempt a sharp distinction between social interaction and added stimulation, and a familiar and responsive adult is likely to optimise "stimulation" for an individual child. Another challenge to the "maternal deprivation" hypothesis took issue with the implication that early experience had particularly important and enduring effects, relative to later

experience. Although there is considerable evidence that later good experience can ameliorate outcome after early deprivation, there is also evidence to suggest that the latter can have persisting effects, especially when emotional and behavioural adjustment rather than cognitive development is the criterion. Two types of theoretical models for long-term effects of early experience are described. A model of differential plasticity with age implies that early experience, acting upon the organism at a sensitive time, has direct effects upon later functioning, as in the ethologically based notion of critical periods. Though this notion has waned in popularity as applied to humans, there is some evidence that experiences of discontinuity of caregiving in early life do have effects upon later social behaviour. Transactional models, in contrast, assume that early experience sets in train processes of interaction between the developing individual and the environment, which act as mediating variables in producing long-term effects. However, it is argued that in practice these forms of explanatory model may overlap.

CHAPTER 3 Background and aims of the study.

The research described in this thesis follows on a series of earlier studies by Tizard and her colleagues, in which children who entered residential nurseries soon after birth were assessed at several stages in their development. These studies were referred to in the previous chapter; here they will be further described so as to give a picture of the starting-point of the present study.

As described in chapters 1 and 2, many of the institutions in the earlier studies were grossly depriving, combining many different kinds of adverse experience. Further, detailed information is often lacking about the institutional environment. Both of these elements make it difficult to examine the differential effects of particular elements of deprivation, and Tizard's studies help to clarify some of these issues. Firstly, the effects of lack of attachment were separated from more general forms of experiential deprivation, as she studied residential nurseries which represented a greatly improved standard of care and stimulation, but in which the children experienced no close longterm attachment relationship. Secondly, the question of reversibility and long-term effects can be examined, as most of the children subsequently left the institutions for family placements where their development was followed up; and as children went to families at different ages, one can examine whether age at placement had any effect on development. Third, as two different kinds of family environment were involved, the factors contributing to reversibility can be clarified if outcomes are different in the two groups.

3.1: The nursery environment.

To begin with the first issue and the studies of young children during the period of institutional care, it is helpful to compare the nurseries studied by Tizard with an

example of the kind of institution encountered in the earlier studies. Comparison with "The Creche", the Lebanese institution studied by Dennis (1973) illustrates how far the nurseries Tizard studied had gone in providing stimulation and psychological care for the children, while close attachment relationships were still absent as in the earlier-studied institutions.

In "The Creche", for most of the time in their first and often their second year children lay on their backs in their cribs. They were bottlefed in the crib and almost never taken from it except for a daily bath and change of clothes. 2- and 3- year olds had individual cribs around the walls of a common room; the photographs show that like the infant's cribs, these had fabric surrounds so that a child in the crib could only see the ceiling, not look out sideways at the room. "Play pens" occupied the centre of the room; a photograph shows four children standing in a wheeled cart, with no room to sit or play. The range of ordinary experiences was grossly constricted; even the windows were too high for a child to see anything but the sky, and they did not go outside the institution. The ratio of children to staff was about 10:1, and there was no individual responsibility for particular children. Most of the caregivers had themselves been reared there as foundlings and then moved to another unstimulating institution. Having only ever lived in institutions, they were apparently unable to work outside such a setting. The mean IQ for the 14 who at some point staffed the Creche was only 57. They did not play with the children, did not respond to the babies' verbalisations or talk to the children while giving physical care. "Probably the most serious deprivation of the Creche children came from the lack of responsiveness to individual needs on the part of their caretakers. They were not cruel; they were only indifferent, ignorant, and apathetic." 4-year-olds had a limited "school", and 5-6-year-olds a morning kindergarten with a trained teacher, but lack of space and resources and the number of children

meant that little individual interaction with the teacher was possible. Because agegroups were separated, there was little possibility of downward transmission of language skill from older to younger children, and in fact there was almost no language communication between children, even less than from adults to children.

In contrast, the nurseries studied by Tizard and her colleagues (Tizard, 1977) seem like another world. In their first year, for instance, the babies were always fed on a nurse's lap, and she was encouraged to talk and play with them at feeding times. Toys were plentiful and from about 4 months babies spent most of their waking time in playpens or on the floor with toys. At about a year the child was gradually introduced into a small mixed-age "family group" containing about six children up to about five years old. Each group had its own home-like rooms, although children were not allowed out of the living-room except when taken as a group to the bathroom or bedroom. Children had access to the garden, plenty of books and play materials; pet animals were usually to be found; children were read to every day. They attended the nursery's own playgroup or occasionally nursery school, until they reached school age. Trips and walks outside the institution took place often; some nurseries encouraged staff to take a child out with them on their day off. Staffing was generous, allowing one or two childcare staff with a group of six children at any one time. Staff were either qualified nursery nurses or part-way through their nursery-nursing course, with sometimes an additional assistant. Altogether, though children had little experience of how people lived outside their nursery, and experienced a rather rigid daily routine within it, there was an enormous contrast between their well-provided and stimulating surroundings and those of the Creche children.

But what these nurseries did have in common with institutions like the Creche was the absence of close and long-term

relationships between staff and children. The nurseries were training institutions for nursery nurses, and though this meant that they were well staffed, it also meant there was very little continuity of care. By age two an average of 24 different caregivers had looked after the children for at least a week. Even within the course of a single 5-day period, Tizard and Tizard (1971) found that between four and eleven staff (average 6.3) had worked on each group, excluding nursery school and night staff. Staff members came and went unpredictably in the lives of these children; they rotated between the groups of children, they went on and off duty, to college, on holiday, and when their training was completed they disappeared for good. Caregiving was also emotionally detached, staff talk to children rarely expressing pleasure or affection (2% of the time), or displeasure and anger (3%) and affectionate physical contact just as rare (1.3%). Nurses, unlike mothers, did not describe often feeling anxious about the children or angry with them.

Further, there was an explicit policy against allowing too close an attachment to develop between children and the staff who cared for them (Tizard and Tizard, 1971). A child who became specifically attached to one adult tended to disrupt the smooth running of the group and also, because any attachments which did develop were inevitably going to be broken, it was felt to be unfair both to the child and to the staff member to allow them to arise. Tizard (1977) commented that "a child who tried to get affection or special attention from a nurse would generally be distracted..... Indeed, as an observer one could confidently predict that if a child and an adult in a nursery were paying close and prolonged attention to each other, then either the child or the adult or both were not part of the nursery establishment" (p33). Even in those nurseries where there was the system of a "special nurse", this by no means approximated a parent. The nurse was not involved in the continuing care of the child, but saw the

child for a few minutes in the day; she came and went as all the staff did and eventually left for good.

3.2: Development at two years old

Tizard and Joseph (1970), in a study of 30 2-year-old children in 22 such nurseries, showed that their mean Cattell Mental Age was 2 months below the norm, and over 3 months below the mean of a comparison group of working-class children who had always lived in their families. The low score of the nursery group was mainly due to their poorly developed language. A separate study of 2 to 5 year-old children in 11 nurseries examined the relationships between the organisational structure of the nurseries, the language environment they provided, and the verbal and non-verbal development of the children (Tizard et al, 1972). In all these nurseries staff talk was adequate to allow average language development, but the level of development was related to the quality of staff talk. Although the range of the latter was limited (e.g. the longest staff mean sentence length per nursery was 5.50 words, and explanations were rare in even the "best" nurseries) the children's language comprehension was strongly correlated with the frequency of "informative" staff talk and the frequency with which the staff answered the children. The quality of staff talk, in turn, appeared crucially related to staff autonomy, a function of the organisation of the nursery.

The nursery children did not show gross behavioural disturbance. Much of their development differed little from children who had been brought up at home, though they were less likely to have achieved bowel and bladder control despite efforts at training beginning around 9-12 months, and less likely to show a sleep disturbance. However their relationships with caregivers and with strangers were most unusual compared to the family-reared 2-year-olds. The institution children, cared for by a large and unpredictably changing number of uninvolved staff, were diffusely

affectionate towards a large number of people - virtually anyone familiar, although they had a clear hierarchy of preferences. At the same time, they were shy and wary of strangers, reflecting their general lack of experience with adults outside the nursery staff. In contrast the family-reared children showed attachment behaviour to a small number of people (an average of four), and their relative ease with strangers reflected their experience with a much wider social network. They differed too in the apparent security of their attachment behaviour. Almost all the nursery children would cry when an attachment figure left the room, and would run to be picked up when they came in whereas two-thirds of the family children did not show such behaviour.

Subsequently, aged between 2 and 7 approximately, most of the children left the institutions and were placed in families. Most of the children were adopted; some were "restored" to their biological parent. For most children this was their first opportunity to make close, selective, mutual attachments to an adult who was consistently available. They were followed up at four years of age (Tizard and Rees, 1974, 1975) and again at eight (Tizard, 1977; Tizard and Hodges, 1978). The study thus took the form of a natural experiment. It is rare for there to be such a profound discontinuity in a child's emotional environment, and this allows an examination of whether the period of institutional care did have lasting effects, and whether they were still reversible up to a given age.

3.3: Development at four and a half years old.

Tizard and Rees (1974) studied 24 four and a half-year-old children who had been adopted, 15 who had been "restored" and 26 still in institutions. These included children assessed in the previous studies by Tizard and Joseph (1970) and Tizard and Tizard (1971). All the children had been uninterruptedly

in institutional care from four months or earlier until at least two years of age. Adopted and restored children had been in their homes for at least 6 months, the mean age at adoptive placement being 3.11 years and at "restoration" 3.50 years.

Adoptive families differed from the families of "restored" children in several ways; they were two-parent families, usually middle-class, and less likely to have other children. Over half the mothers of restored children were single parents, and they were generally younger and less secure financially than adoptive families. Most had not maintained regular contact with their child in the nursery; some had not visited at all.

The institutional and ex-institutional children were compared with a group of family-reared London working-class children who had also formed a contrast group in the study of two-year-olds.

By the age of four and a half, the language retardation found in the institutional children was no longer evident in any group. Cognitive retardation had thus been reversed even within the institutions, and a marked increase in IQ had occurred in children placed in adoptive homes, which offered a very favourable and stimulating environment. The mean WPPSI scores of all groups were at least average; the adopted childrens scores were higher than those of any other group, the mean being 114.9 as compared to 100.1 for the "restored" group, 104.9 for the institutional group and 111.5 for the family-reared comparison group. WPPSI scores were correlated with measures of the breadth of experience provided for the children.

Adopted children had the lowest mean number of behaviour problems. Institutional children had the highest, and were significantly more likely to show poor concentration,

difficult relationships with peers, temper tantrums and clinging. 20 out of the 24 adoptive mothers felt the child was deeply attached to them, but 70% of the children still in institutions were said by the staff "not to care deeply about anyone", and they tended to be immature and clinging in their attachment behaviour and more likely to be attentionseeking than other children. For the institutional children, the turnover in caregiving figures had continued; the average number of people who had worked with them for at least a week in the last two years was 25.8 (range 4-45).

However, the ex-institutional children had not entirely come to resemble family-reared children in their social behaviour towards adults. Some adopted and restored children as well as institutional children were said by their mothers or nurses to be over-friendly towards strangers, and also to allow strangers to put them to bed or to comfort them if they were hurt. This was not reported for any of the family-reared children. Marked attention seeking was reported for 42% of institutional children, 39% of restored children, 29% of adopted children and 20% of the family-reared comparison group.

Age at leaving the institution did not appear related to the behaviour problem score, or to indiscriminate overfriendliness.

3.4: Development at 8 years old

When the children were 8 years old, they were followed up again (Tizard, 1977; Tizard and Hodges, 1978). By this time most had been adopted or restored, and only 8 children remained in institutions. A total of 25 adopted children, plus three children in long-term quasi-adoptive foster placements, was seen, and 13 restored children, besides the 8 institutional children. Figure 4.1 in chapter 4 shows the

numbers of children changing placement or dropping out of the study, and the age by which these changes occurred.

The institutional children as a group were not retarded either in IQ scores (mean WISC score 105.1, range 88-113) or in reading attainment. This was despite the absence, for all but one child, not only of a permanent attachment figure but of any continuing contact with an adult; the number of staff who had worked with these children since they had been seen three and a half years before ranged from 5 to 17-plus. Their teachers and houseparents did not report particular problems, though they tended to be unpopular at school. However, since so few children remained in institutions, the focus of enquiry shifted to how far adopted and restored children still showed some apparent effects of their earlier institutional rearing; possible effects of age at leaving the institution; and the effect of the different family placements (adoption vs restoration) on outcome.

The ex-institutional groups differed greatly from each other. Children adopted before age 4 had a mean WISC IQ at 8 of 115, compared to 103 for children restored to their biological families before age 4. Their reading age was 10 months in advance of the restored group. Though these differences are related to the social class difference between the adoptive and "restored" families, they were also related within each group to attachment to the mother and fewer behaviour problems. Of the children adopted after four and a half, only one, the youngest at placement, had increased in IQ, while all the children placed before 4 who had previously been tested at 2 showed increases, mostly large ones. The numbers involved are small, but the finding gave some support to the idea of a critical or sensitive period regarding cognitive development.

Eighty-four per cent of adoptive mothers and 90% of mothers of comparison children said they felt their 8-year-old was

closely attached to them, but this was true of only 54% of the mothers of the restored children, and 43% of housemothers of institutional children. Thus the period of institutional care with its general absence of attachments or opportunities for close relationships did not prevent children forming a close and mutually affectionate relationship with parents once they entered a family; but whether or not they did so depended to a large extent on the parents' willingness to develop one, to accept dependent behaviour initially and to put considerable time and effort into the building of the relationship. On the whole the adoptive parents were much readier to do this than the mothers of "restored" children, who had been ambivalent about having the children to live with them, spent less time playing with the children, expected greater independence of them, and were also more likely to have other children, whom they generally preferred. Stepfathers of the restored children were less involved with them than the adoptive fathers with their children.

According to the parents, the ex-institutional children on average showed no more behaviour problems than the home-reared comparison children, except that they were more often "over-friendly" and attention-seeking. However, their teachers reported considerably more problems, notably attention-seeking behaviour, restlessness, disobedience and poor peer relationships. Difficulties were particularly marked in the restored group, but both ex-institutional groups showed more difficulties than classmates or the comparison children. Parents tended to report the same behaviour in the child as did the teachers, but not to see it as a problem as the teacher did. As the current family circumstances of the adopted and restored groups were so different, it appeared likely that the behaviour problems which they had in common were based on their earlier shared institutional experience, which thus seemed to have effects on development up to approximately six years after leaving the institution.

3.5: Implications in terms of earlier research, and questions for further study.

In terms of the research reviewed in Chapters 1 and 2, Tizard's studies offered some answers and also pointed to questions for further investigation.

i) Firstly, children whose first years had been spent in institutions where they did not lack cognitive and general social stimulation, did not show intellectual retardation. This bore out the view that understimulation played a major role in the retardation found in earlier studies in very depriving institutions, although the study could not test which particular areas of stimulation might be most important. For example, it could not test the extreme hypothesis suggested by Casler (1968) that perceptual needs were more important than social ones, since the children in Tizard's study were not socially isolated, though lacking a close attachment relationship. But because of this, and unlike Klackenberg's (1956) study, where the possibility of a close relationship between nurses and "their" two or three children might have accounted for the children's adequate cognitive development, Tizard's study showed unambiguously that average cognitive development occurred without such a close long-term attachment relationship. This disconfirmed the view of the various researchers, including Goldfarb and Bowlby, who had argued that lowered IQ and delayed language development were results of maternal deprivation rather than of other aspects of institutional care.

ii) Although the institutional setting did not lead to retarded development, in that children were of normal IQ, it apparently did not allow optimal development, in that marked IQ gains occurred when children were adopted into families which gave them much individual attention and stimulation. The finding that these gains seemed to occur only if children were adopted before the age of around four and a half,

supported the notion of a critical or sensitive period regarding cognitive development. However, this required further investigation, because when the data were collected at age 8 the children adopted after four and a half had been in their adoptive homes for a shorter time, relative to their age, than the earlier-adopted children when they were assessed at four and a half; so it was possible that given time their IQ scores would rise to approximate the average of the earlier-adopted group. In this case, a critical period would not be indicated, although a much greater time needed to make IQ gains might still be seen as evidence of decreased later sensitivity (see section 2.3, chapter 2).

iii) As regards the question of the relative importance of early and later experience, in Tizard's study the children's subsequent experience as well as experience in the institution was shown to be important, evidenced by the contrast between the adopted and the restored groups. Early experience did not set an invariable trajectory regardless of what followed. Adopted children performed much better in cognitive tests than children who were restored; and as regards behavior, they showed fewer problems and were much more often seen as attached to a parent. This certainly argued against the idea of inevitable or irreversible effects (as suggested by Goldfarb and Bowlby's 1951 monograph) and indicated that functioning was very substantially influenced by later experience, as argued by a number of later authors (e.g. Clarke and Clarke (1976), Skeels (1966)), and indeed by the later work of Bowlby himself.

iv) However, though the early institutional period did not result in cognitive retardation, and although later experience modified its behavioural outcome, it did result in some characteristic forms of overfriendly behaviour towards adults, and these were still evident to a significant degree at age 8. Teachers also reported numerous behaviour difficulties in ex-institutional children assessed at this age, resembling

those described e.g. by Goldfarb; and the parents account of their children's behaviour tended to agree with that of the teachers, save that they did not generally experience the behaviour as a problem. These findings, in contrast to the cognitive ones, supported the view (Bowlby, 1951; Ainsworth, 1962) that institutional experience with a lack of a close attachment relationship could have some lasting effects on behaviour and personality, though less extreme than in children from much more depriving institutions (Goldfarb 1943a, 1944).

Hence a central question emerging for further study, was whether having persisted thus far, these behavioural and social difficulties indicated irreversible effects of the children's early institutional experience. Since in many ways the ex-institutional children's behaviour had "normalised" within their families, it was possible that as the length of time they had lived in their family increased, there would be a corresponding decrease in the remaining differences between them and home-reared children. If this reached the point where the differences were no longer significant, the effects of institutional rearing could be seen as completely overcome. This was also a particularly interesting area for investigation because, as noted in section 2.3, a number of the earlier studies tended to focus on cognitive development rather than behaviour, and data concerning social relationships in particular tended to be sketchy. It was also of interest because the study by Cadoret and Cain (1980) suggested that behavioural effects of early experience - antisocial behaviour, in this case - might show up for the first time in adolescence, without being evident before (Gardner, Hawkes and Burchinal, 1961).

v) A further question concerned the relatively good development of the adopted children. At eight they presented a better picture in almost every way than the "restored" children, although they still showed more difficulties,

especially at school, than children who had always lived at home. The National Child Development Study (Lambert and Streather, 1980), found not only that 11-year-old adopted and illegitimate children were less well adjusted than legitimate children in comparable home circumstances, but that the adjustment of the adopted group appeared to have deteriorated between the ages of 7 and 11. Adolescence is often regarded as a particularly stressful period for adoptees and their families (Mackie, 1982; Schechter, 1960; Chess, 1953) and this might imply that adoptees difficulties were likely to increase further in adolescence. However, Bohman and Sigvardsson (1985) found a decrease in problems in adoptees between 11 and 15, confirmed at 18, while illegitimate and fostered children showed many more difficulties than adoptees; Maughan and Pickles (1990), reporting on the subsequent stages of the NCD study, found similarly that adjustment problems in the adoptees were much less marked at 16 than at 11 years, while illegitimate children who had remained with their parents continued to show the highest rate of behavioural difficulties, even when poorer social and material circumstances had been taken into account; and Raynor's (1981) findings, using retrospective accounts of young adult adoptees, also suggest that difficulties decrease after childhood. Thus besides the fundamental question of the effects of early institutional care there is the issue of whether adoption carried more or fewer problems with it as the children grew older, and whether it continued to be a relatively advantageous placement compared to restoration under the circumstances experienced by the children in this study.

CHAPTER 4 Sample, comparison groups, and method of study.

The ex-institutional children were followed up when they were 16 years old. This chapter describes first the research hypotheses, then the measures used to investigate them and the research procedure; then the structure of the study as a whole and the various sample and comparison groups.

4.1: The research hypotheses and the measures used.

As stated at the end of the last chapter, the issue of the reversibility of the effects of early institutionalisation is the frame of reference for this research. Many of the earlier studies, described in Chapters 1 and 2, as well as previous stages of this study (chapter 3), found some persisting effects at various intervals after institutionalised children were placed in families, (although much less severe effects than expected on the basis of the early work of Goldfarb and Bowlby). The expectation in the present research was that some such effects, though probably reduced, might appear even though most of the adolescents had now spent by far the greater proportion of their lives in their family setting.

For clarity, the six areas of investigation listed below are framed in terms of what would be an extreme hypothesis; that any effects of earlier institutional care are completely reversed by age 16. Some subsidiary hypotheses are based on findings of earlier stages of the study.

i) Cognitive development. Mean WISC scores of all groups, including those children still in institutions, lay within the average range at 8. That is, no cognitive damage, immediate or persisting, was apparent, and none would be expected to appear subsequently as a result of early institutional experience. However, as early-adopted children showed a significantly higher WISC score than others, it was hypothesised that later-adopted children would show IQ rises equivalent to those of the earlier-adopted children by 16. It was therefore

decided to assess all ex-institutional children using the WAIS at 16. At age 8, the Neale reading test was used, as it was felt that reading would provide the best single indicator of school attainment. The earlier adopted children had a mean reading age 6 months in advance of chronological age, while the mean for the restored group was 4 months behind the C.A. It was further hypothesised that school attainment of ex-institutional groups would be equivalent to that of the matched comparisons.

ii) Behavioural and emotional problems reported by parents. It was hypothesised that ex-institutional groups would, as at 8, show no more or different problems than matched comparisons as reported by the parents. However, because of their more adverse home circumstances, restored adolescents would be expected to show more problems than adoptees, as they had done on follow-up at 8. A comprehensive structured interview and questionnaire were therefore used to elicit information from the parents.

iii) Behavioural and emotional problems reported by teachers. It was hypothesised that ex-institutional groups would show no more or different problems than comparison adolescents, implying a reduction in their previously significantly higher levels of problems. Restored adolescents would again, as in (ii) above, be expected to show more difficulties than the adoptees. It was therefore decided to obtain information from the teachers using postal questionnaires.

iv) Behavioural and emotional problems reported by adolescents. Information on this area from the children themselves was not available from earlier stages of the study, but it was hypothesised that at 16 by their own report the ex-institutional groups would show no more or different problems than comparisons. For this reason it was decided to use a structured interview to obtain the adolescents own views on their experience and functioning.

v) Attachment to parents. The most extreme hypothesis of reversibility might state that regardless of the type of family setting, ex-institutional children should develop attachments to their parents indistinguishable from those of matched comparisons. However, earlier stages of the study had shown major differences between families, in that adoptive families generally offered settings which favoured the development of attachments, including much individual attention, shared activity, and tolerance of dependent behaviour, in sharp contrast to families of restored children who expected more independence and offered less shared activity than other working-class families. It was therefore hypothesised that, if early institutionalisation does not prevent the development of attachments given that later conditions favour their development, adopted children would show no less attachment to parents than their matched comparisons, while restored children would show less than adoptees and also less than their own matched comparisons. This area was therefore explored in the structured interviews with the parent and adolescent.

vi) Peer relationships. Various difficulties with peers were apparent at 8. It was hypothesised that at 16 these would be resolved and thus there would be no difference between ex-institutional adolescents and their matched comparisons as regards the quality or pattern of peer relations. This was investigated in the structured interviews with the parent and adolescents, and via questionnaires completed by the adolescents and the teachers.

vii) Unusual features of social behaviour. These features, such as overfriendliness towards adults and particular efforts to gain adult attention, were significantly more common in the ex-institutional group at age 8. It was hypothesised that they would have disappeared by age 16 and no others would have appeared which differentiated the ex-institutional and comparison groups. This was investigated

in the structured interviews and in the questionnaires completed by the adolescents and the teachers.

4.2: Description of measures used.

The Wechsler Adult Intelligence Scale (WAIS) and the Rutter "A" and "B" scales are standardised and widely used instruments. All other measures used are reproduced in full in the Appendices.

The WAIS (Wechsler, 1955) was used as a standardised intelligence test covering this agegroup and allowing comparison with the WPPSI and the WISC which had been used at the 4 and 8 year old stages of the study.

Regarding school attainment, information was collected in the interviews (see below) concerning public examination passes, and subsequently by letter if the child was sitting further examinations.

The Parent Interview Schedule (Appendix 2) is a structured interview, devised for this study to investigate various aspects of the adolescents' behaviour, emotions and social relationships, relationships within the family, and to follow up specifically on areas such as social and peer relationships where difficulties had been found at earlier stages of the study. Reference was made in its construction to the parent interview used in the previous stage of the study which itself had drawn on the parental interview used for psychiatric assessment of children in the Isle of Wight study. (Rutter et al., 1970). This allowed the comparison of groups on many specific areas of behaviour, but to provide an overall index of problems, the Parent Interview Problem Score was also devised, based on the answers to 28 of the items covered in the interview. The construction of this score is detailed in Appendix 3.

To investigate some other aspects of behaviour as reported by the parent, the Rutter "A" scale (the Child Scale A2) was used. This is a questionnaire completed by the parent, consisting of 31 items concerning aspects of the adolescents

health problems, habits and behaviour, and also yielding "neurotic" and "antisocial" subscale scores. (Rutter et al., 1970). The decision was made to use this questionnaire as well as the interview, not only because it is standardised and widely used, but also because certain areas covered could be omitted from the interview, saving time in the long series of interviews and tests.

To investigate the adolescents reports of their own behaviour, family and peer relationships, and emotions, the Adolescent Interview Schedule (Appendix 4) was devised for this study. This is a structured interview in which the adolescent is asked about various aspects of school and home experience, social relationships, family relationships, anxieties, and behaviour. Reference was made in its construction to the Isle of Wight adolescent study (Rutter et al., 1976) and the interview designed for the adolescent stage of the Newsom's cohort study; and a section on confiding relationships drew on work then being developed by Monck, Graham, Richman and Dobbs (Monck, 1991). Like the parent interview, it was designed to investigate particular areas which were of interest because of previous findings as well as to give a comprehensive picture. An index of difficulties, the Adolescent Interview Problem Score was devised to give an overall picture; this was based on 18 items from the interview, and its construction is detailed in Appendix 3.

Since peer and social relationships were an area of particular interest, the Questionnaire on Social Difficulty (Lindsay and Lindsay, 1982) (Appendix 5) was also used. This is a self-report questionnaire designed for adolescents, covering different types of social difficulty in relation to adults and to peers of the same and opposite sex, and it was included as it was felt that adolescents might find it easier to respond in written questionnaire format than in face-to-face interview if this was an area of difficulty.

To elicit information from teachers, two measures were used. The Rutter "B" scale (the Child Scale B2 (Teachers)) is a standardised and widely used questionnaire consisting of 26 brief statements about the child's behaviour and yielding "antisocial" and "neurotic" subscale scores beside a total score (Rutter et al., 1970). The "B" scale had been used at the 8-year-old stage of the study, and although some items were less appropriate for an adolescent age group, direct comparisons were thus possible.

The Teachers Questionnaire (Appendix 6) was devised for this study and consists of 20 questions focusing on the child's social relationships and behaviour in school in relation to children and adults. This questionnaire was devised because the "B" scale provides relatively little information on the area of social relationships, which was one of particular importance to the study.

4.3: Assessment procedures.

Interviews and testing were carried out in the adolescents' own home setting. Those adolescents living away from their families were interviewed in their own setting. Each visit to the home or institution took several hours, and two visits were sometimes necessary to complete the assessment. The parent or careworker and the adolescent were interviewed separately, and all interviewees were informed beforehand that their responses were confidential. With the agreement of the adolescent and his or her family, the "B" scale and the Teachers' Questionnaire were then sent to the school for completion by the adolescent's teacher. The accompanying letter gave no indication of the context of the research, or whether the adolescent was adopted, restored or a comparison, but asked for the information as part of a study of 16-year-olds. Teachers were asked to complete one set of questionnaires for the named adolescent, and one for the same-sex classmate nearest in age. These latter formed the school comparison group.

Interviews were tape-recorded with the permission of the adolescent or parent being interviewed. All interview questions were then scored by the writer from full notes made by the interviewer at the time plus the tape-recording.

4.4: Structure of the study.

Figure 4.1 indicates the structure of the whole study, from the beginning (left-hand side) when the children were in residential nurseries, up to the present stage (right-hand side) when the children had reached age 16. The figure shows the number of children seen at each stage, numbers dropping out, and moves from one to another group. The figure does not show comparison groups; these, as well as the composition of the ex-institutional groups, are described below.

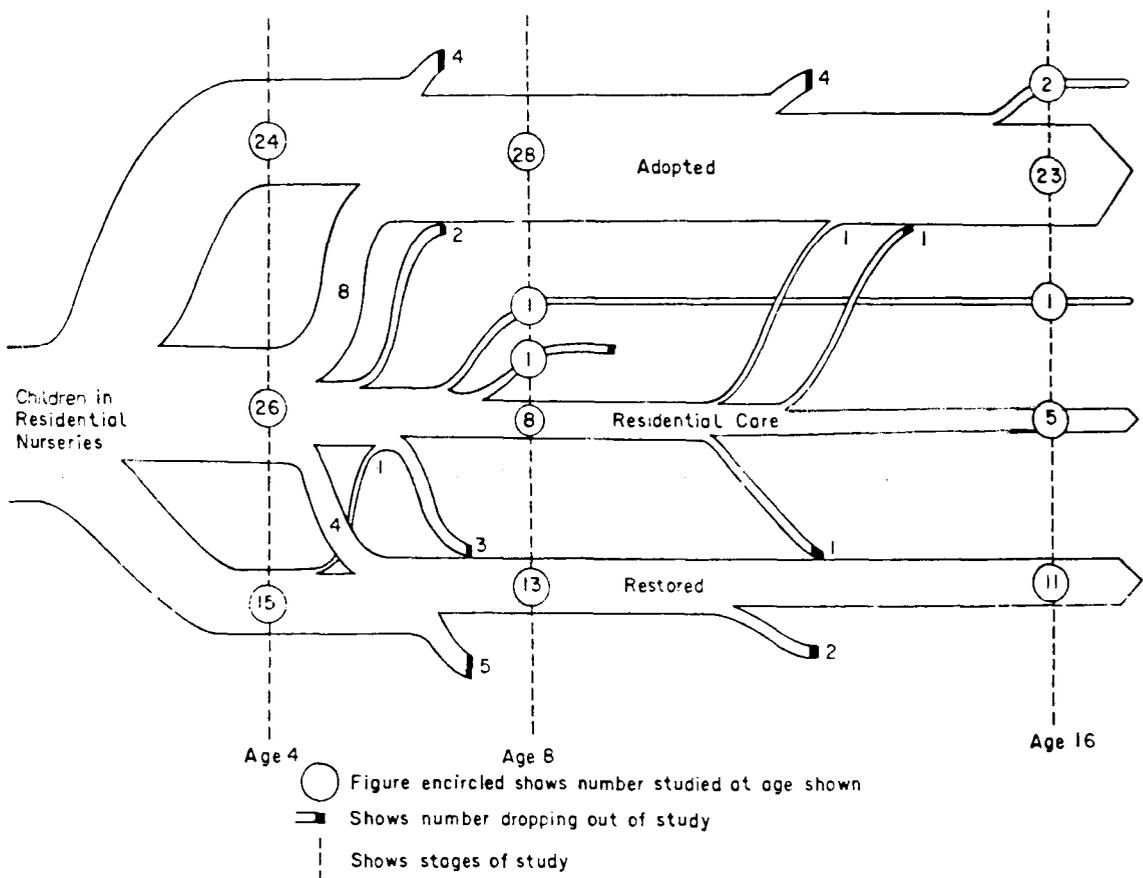


Figure 4.1; structure of the study. Illustration of changes over the course of the study in numbers and composition of groups.

4.5: Ex-institutional and institutional groups.

All the children were located, although this was difficult in some cases as there had been no contact for eight years. Where the family had moved from their earlier address, and no forwarding address was available, or indications sufficient to allow them to be located via the telephone directory, other channels were used. These included an approach to the primary school for information as to which secondary school the child had attended, so that a letter could then be sent via the secondary school; contacting the Family Practitioner Committee of the area to which the adolescent and their family were believed to have moved in order to locate them via their GP; and in one case where the family was likely to be known to the Social Services Department, the family was located and the approach made with the help of the latter. Where a child had been in residential care when last seen, the Voluntary Societies concerned were asked for their permission to see the child again if still in their care; if the child was now living with a family, the Societies were asked to approach the child's family on behalf of the research study. The latter was also the procedure with Local Authority Social Services Departments in those cases where a child had entered Local Authority care since last seen.

Of the 51 children studied at 8 years old, nine were not available for study at age 16. These consisted of two families of restored adolescents and four adoptive families who refused to participate; two children who had been in residential care at 8 years old, and had, respectively, been restored to parents living abroad, and adopted by a family who did not respond to the social worker who approached them several times on behalf of the study; and one girl who had been in foster care at 8, subsequently living in succession with her mother, her putative father and his wife, and her former fosterparents, before becoming untraceable.

These nine cases, added to the 14 children unavailable after age 4, meant that the losses over the 12 years between ages 4 and 16 amount to 35%. The NCD study (Lambert and Streather, 1980) similarly lost approximately one-third of its sample by age 11.

i) Adopted children. Of the 28 adopted children seen at age 8, 26 were still in their adoptive homes at age 16, and two placements had broken down. One of these adolescents was in a foster home, and still in touch with his former adoptive parents. The other, who had been one of the most disruptive and unhappy children seen at age 8, was in local authority care at 16, sharing lodgings with other young people in care. She no longer had any contact with her former adoptive parents.

The adopted group was increased by one child adopted just before age 10; it also included three boys who when seen at age 8 were fostered in what were intended by the Social Services Departments and the foster families as permanent placements, and who were still in these families at 16. These placements had been made when the children were aged 5 years 3 months, 6 years 9 months, and 8 years 3 months respectively. In all three cases the intention and expectation of permanency was clear from the start and there was no possibility of the biological parent reclaiming the child. These were felt to be psychologically, if not legally, adoption placements.

One adopted adolescent was living in a residential psychiatric unit; he maintained contact with his parents, spending some weekends at home, and was classified as still belonging in the adopted group.

ii) Restored children. Twelve out of 13 restored children seen at age 8 were still with their parents at age 16. The remaining one was currently in a secure unit for disturbed and

delinquent adolescents, but was included in the restored group although her family could not be interviewed. Three other restored girls had had periods away from home, two in residential units for young people with emotional and behaviour difficulties, and one living with friends, having run away from home. All were back in their families at the time of interview.

iii) Children in residential care at 8. All the children had experienced at least one change of setting since age 8. Only one child had remained in residential care throughout, and at 16 was sharing lodgings, arranged by his social worker. The younger siblings who had been in care with him had been restored to his mother, but she refused to have him home for more than occasional short visits because of his persistent stealing, Court record, and extremely negative behaviour towards her and his siblings. A second boy had been boarded out at age 15 but was living semi-independently as he had been unable to integrate into his foster family. A third had been fostered on the closure of the childrens'home where he lived. The placement broke down when the foster-mother's health deteriorated. The boy returned to a residential unit and was about to enter the armed forces. One girl had been restored to her biological mother, become pregnant at age 15, re-entered residential care and was seen in a foster family after the birth and relinquishment of her child for adoption; a second had re-entered residential care when a foster placement broke down. One child had been adopted, and one restored abroad; neither could be interviewed at age 16.

iv) Fostered children. A girl seen at 8 in foster care had subsequently made several moves before becoming untraceable at 16. A boy seen in an assessment centre at age 8 shortly after a fostering breakdown had been successfully adopted from a subsequent children's home and was interviewed in his adoptive family at age 16. Another boy had been fostered with a view to adoption at age 8, but his biological mother had wished to

re-establish contact and the adoption plan had been abandoned. Several changes of placement later, he was seen in his foster-home, where his behaviour was causing severe difficulties.

4.6: Numbers of ex-institutional and institutional children seen at age 16.

Because of refusals, emigrations, and other reasons described above, it was not possible to interview all the children whose whereabouts at 16 have just been described. The numbers interviewed were 17 adopted boys and 6 adopted girls; 6 restored boys and 5 restored girls; 3 boys and 2 girls in institutional care; the boy and girl whose adoptions had broken down after age 8, and the fostered boy whose prospective adoption had not occurred because of his mother's renewed wish for contact.

It was decided that these numbers were too small to allow the groups to be further sub-divided so as to explore possible gender differences. Further, systematic data will be presented only for the adopted and restored groups, as the other 8 children had life experiences too heterogeneous for comparison.

4.7: Children with one or both black biological parents.

A disproportionately high number of the children unavailable for study at age¹⁶ had black biological parents; five out of the total of nine unavailable. The reasons for the losses were very varied. Among the children who had been in residential care when seen at 8, the parents of one black child who had been adopted did not respond to repeated approaches on behalf of the study, and one black child had been restored and gone to live with family overseas. Of the four adoptive families who refused to participate, two were families of black children; in one of these cases the family did not want to take part because the adoptive mother was gravely ill. (One

of the two adoption breakdowns involved a black child, thus further reducing the numbers in the adopted group.) Of the two families of restored children who refused to take part, one involved a black child. This left a total of four black children in the adopted group, four in the restored group, and three in the group who were in residential care or boarded out. Because of these losses and the very small numbers remaining, it was not possible to examine the findings specifically in relation to black children.

4.8: Stability of types of placement between 2 and 16.

A total of 33 children in the study were placed in adoptive families after the age of 2, and although not all could be interviewed, information about the stability of the placement could be obtained for 24 of them. Two of these children had experienced the breakdown of an intended adoption placement before the age of 4, before they joined the adoptive families in which they were seen in this study. Two adoptions broke down between ages 8 and 16, and one adopted adolescent was in a psychiatric in-patient unit at age 16.

A total of 25 children were restored to biological parents after the age of 2, and information about the placements was available for 16 of these. One adolescent was in a secure unit at 16, two fostered, one in quasi-adoptive fostering, and one became untraceable. Two other restored children had spent some time back in residential care after being restored, and one had run away from the family and lived separately, but all were now back with their families. Thus among the restored children for whom information was available, as many placements had broken down, at least temporarily, as had not. This proportion is much higher than in the case of the adoptive placements. As described above, the greatest instability occurred in the institutional group.

4.9: Effects of attrition and changes in placement groups upon characteristics of sample.

There was no evidence that the earlier loss of 14 children from the study between the ages of 4 and 8 biased the IQ differences found between the groups at 8. Differences in the group mean scores at age 8 between those children from the adopted and restored groups who could not be seen at 16 and those who remained, were minimal and not significant. Regarding behaviour problems, the adopted children unavailable for study at age 8 had shown somewhat fewer problems of adjustment at age 4, and the restored children somewhat more, than the average of their respective groups. The data do not suggest a systematic loss of children who, as 8-year-olds, presented more or fewer problems at home than those who were available for study at 16. This cannot adequately be evaluated as regards problems at school, since too few "B" scales are involved.

4.10: Comparison groups.

The comparison group involved in the earlier stages of the study had been set up when the study children were in institutions aged 2. It consisted of 30 London children located through the files of the Health Authorities of two London boroughs. All the children had been healthy full-term babies, and had always lived at home and in two-parent families. Family size was small (a mean number of 2.33 children when the study children were four-and-a-half). All the fathers were working-class, the proportions of skilled, semi-skilled and unskilled workers corresponding to those in the South-East England census. This group was initially intended to allow comparison of institutional with family rearing, but as children left the institutions for families it became increasingly inappropriate as a comparison either with the primarily middle-class adopted group, or with the restored group who often lived in particularly socially disadvantaged homes. Tizard and Hodges (1978) interviewed an additional

group of 20 middle-class mothers of eight-year-olds to obtain some indication of whether differences between the adopted and London working-class children were due to social class or ex-institutional and adoptive status. However, this did not address the difficulty of making comparisons with the restored children. A further difficulty was that the majority of the ex-institutional children were boys, while the London working-class comparison group consisted of 15 boys and 15 girls.

A new, matched, comparison group was therefore formed to overcome these difficulties. Each of the study 16-year-olds was matched with a comparison 16-year-old. The criteria besides age were: sex; one- or two- parent family; position in family (oldest, youngest, neither, or singleton); and Registrar-General's occupational classification of the family's main breadwinner. Mentally or physically handicapped or chronically ill adolescents, or any who had spent longer than a few weeks away from their family in residential care or hospital at any age, were excluded. Although the study adolescents were scattered throughout the British Isles, all the matched comparisons were drawn from the Greater London area, as the task of obtaining and interviewing the group would otherwise have called for more resources than were available.

The matched comparison adolescents were obtained via G.P. practices. Fifty-three practices were approached; eight refused, and 22 did not reply. The final comparison group was obtained from 16 different practices. All parents of 16-year-olds in these practices were approached via a letter from the G.P. asking for co-operation in a study of adolescents and their families. Approximately 30% of families indicated that they did not wish to be contacted. Further details were then obtained about the remainder via a brief telephone screening procedure so as to match a comparison adolescent to each individual ex-institutional adolescent.

The fact that some families opted out introduces a possible bias, although there is no indication of the direction in which it may operate. It is possible that families with severe difficulties in child-rearing may have indicated that they did not wish to be contacted, although some families with considerable difficulties did not opt out. The comparison adolescents and their families were assessed just as for the ex-institutional adolescents, save that the WAIS was not given.

Constraints of time and resources required that the interviewing of parents and adolescents be shared. The institutional and ex-institutional adolescents and their parents or careworkers were interviewed by the writer, and the matched comparison group by one of four other researchers, all experienced interviewers. The drawback of this design is that it confounds the interviewer with the group studied. The rationale for the design is that it was of crucial importance to retain the maximum possible number of ex-institutional children and their families in the study. Almost all of the families contacted in preparation, to see whether sufficient numbers could be located to pursue the study, indicated that they remembered the writer visiting and interviewing them when the children were eight; most expressed willingness or even enthusiasm to see her again, while some indicated reservations about the alternative possibility mentioned, of a visit from an interviewer unknown to them. In order to ensure the highest possible rate of participation, it was decided that the writer would interview all the ex-institutional group and their families. An additional drawback implicit in the overall design is that interviews could not be carried out blind to the child's status. However, this would have been impossible to achieve regardless of design, as indications of the child's ex-institutional status inevitably emerged somewhere in the course of the interview with the parent about the child. Interviews were

tape-recorded, and scored by the writer in the same way as for the interviews with the ex-institutional group.

Teachers were asked to complete postal questionnaires on the ex-institutional adolescent or matched comparison adolescent.

The covering letter was identical for ex-institutional adolescents and for their matched comparisons, and gave no indication of the group status of the child or the background of the study. Teachers were also asked to complete the same questionnaires for the same-sex classmate next in age to the child named. Thus for each of the ex-institutional groups and matched comparison groups, a school comparison group was formed. This provided a check on the possibility that singling a child out by name might affect the teachers reporting of problems, as if so it should apply both to ex-institutional adolescents and to matched comparisons, but not to school comparisons. It also provided a control for any possible effects of the type or location of schools, which was felt to be useful because all the matched comparison adolescents attended schools in the London area, while ex-institutional children were very widely dispersed.

Chapter 5. IQ and school attainments.

In this first of three chapters setting out the findings of the study, the IQ test scores and school attainments of the children are described.

5.1: Comparison of group mean WAIS scores.

Table 5.1 below shows the group mean IQ scores on the WISC at age 8 and on the WAIS at age 16. Scores are only included in the mean if available at both 8 and 16. The groups at 8 are restricted to those children who made up the group at age 16. For example, the scores of the adopted children who were tested aged 8 but whose adoptions broke down between ages 8 and 16, are not included in the "adopted" group at either age.

Table 5.1 Group mean IQ scores at 8 years and at 16 years.

Group	N	8 years;		16 years;	
		WISC	sd	WAIS	sd
Adopted before 4	11	114.6	12.1	114.1	8.0
Restored " "	8	101.4	16.5	96.3	16.2
Adopted after 4	8	97.4	14.3	102.0	13.0
Restored " "	3	94.0	22.9	97.7	22.8
Residential care	5	93.6	6.1	95.8	9.8
Several placements	4	106.3	16.2	104.8	21.3

None of the group means fell below the average range. However, analyses of variance show that the group of eleven adolescents adopted before age four and a half scored significantly higher than the group restored before the same age (Full scale, $F=10.13$, $p=0.005$; Verbal sub-scale, $F=5.87$,

$p < 0.03$; Performance sub-scale, $F = 10.99, p = 0.004$), and significantly higher than the group in residential care (Full Scale, $F = 14.18, p = 0.002$; Verbal, $F = 16.26, p = 0.001$; Performance, $F = 7.77, p < 0.015$). They also gained significantly higher scores than the adolescents adopted after this age on the Full scale ($F = 6.36, p = 0.02$) and Performance sub-scale ($F = 11.92, p = 0.003$). The group adopted after the age of four and a half, and the group restored before this age, did not differ significantly from the group in residential care. The four adolescents who had had several placements had histories too diverse to allow them to be treated as a group and compared with others.

5.2: Changes in group mean IQ scores.

Table 5.1 shows that there was little change in group mean IQs between ages 8 and 16. A question of obvious interest concerns the origin of the difference between the groups, and in particular of the high mean score of the group adopted before four and a half. Were the groups always so different, or at what point did their scores diverge?

Figure 5.2 shows trends in IQ score for children adopted or restored before this age and also for children in residential care. For the WPPSI and WISC means, two scores are shown, producing a break in the line at ages four and a half and eight. For example, two different scores are given for restored children at age 8. The mean score of all those who had previously been tested at the age of four and a half was 103.4. However, not all these children could be retested at age 16, and the mean score of those 8-year-olds for whom 16-year-old scores were available was 101.4. The break in the line thus represents the effect of sample attrition upon the scores, and each section of the line shows the change in the mean score based upon a test and retest of exactly the same group of children.

The Cattell Infant Development Scale was used to test children at the age of two while still in institutional care (Tizard and Joseph, 1970), and scores were available for ten children who were subsequently adopted, and nine who were subsequently restored.

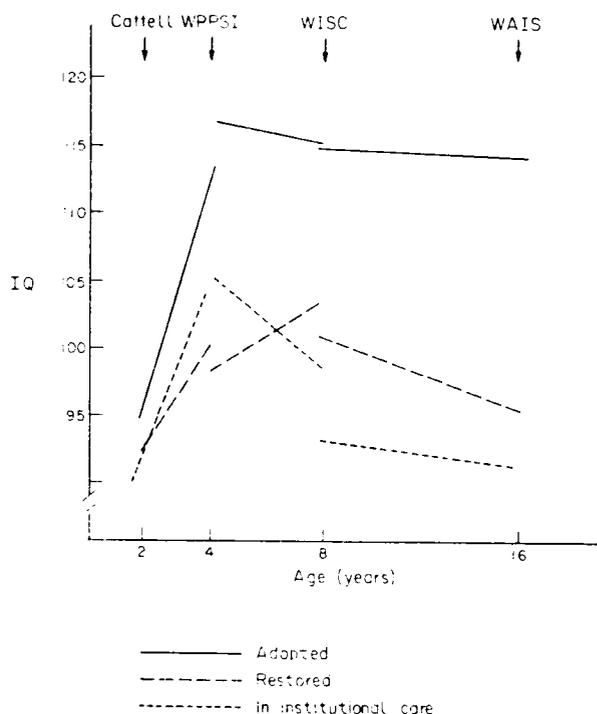


Figure 5.2: Trends in IQ scores for children placed before 4 and a half years.

5.3: Children adopted after age four and a half.

Because the foregoing data suggest that adoptive placement before age four and a half led to a marked increase in IQ scores, it is of interest to examine IQ changes in the nine children placed in adoptive or quasi-adoptive foster homes after this age. Table 5.3 presents the placement history and the IQ scores at 4, 8, and 16.

It had been noted when the children were aged 8 that of those placed after the age of four and a half only one (child C) showed a noticeable rise in IQ, and that he had been placed at 4 years 7 months, earlier than the others. By age 16, the

IQs of six out of the nine children placed after the age of four and a half had either fallen, or risen by no more than a few points. Three, however (child B, child F and child G) showed considerable increases, of ten points or more. The latter two were the children with the lowest scores at age 8; both had shown substantial rises, bringing them within the normal range at 16.

Table 5.3: IQ changes in children placed in adoptive or quasi-adoptive foster homes after age four and a half.

Child	Placement history	Full scale scores		
		WPPSI age 4	WISC age 8	WAIS age 16
A	Fostered* at 5y 3m	93	90	94
B	Restored before 4y, returned to residential care, fostered* at 8y 3m	96	98	120
C	Adopted* at 4y 7m, parental divorce between 8y and 16y	107	125	116
D	Restored at 4y, returned to residential care, fostered** at 6y 9m	89	88	82
E	Adopted* at 7y 4m	114	107	112
F	Adopted** at 7y 1m	87	83	101
G	Adopted** at 5y 2m too shy to test		84	94
H	Adopted* at 5y	111	104	97
I	Fostered* at 5y 1m, returned to residential care at 8y, adopted** at 9y 10m	109	106	91

*Registrar-General's occupational classification I or II.

**Classification III, IV or V.

The numbers are too small to allow any general conclusions about IQ in relation to age at family placement. Further, among the 9 children placed after four and a half, placement age bears no relationship to IQ change. However, other likely variables do not appear to account for the difference between the earlier-adopted and later-adopted children. A smaller proportion of later-adopted children went to non-manual homes, but the parents' social class does not appear to be related to change in the child's IQ, as shown in Table 5.4 below.

Table 5.4: Change in IQ score between pre-placement and last post-placement test in 9 children adopted after age four and a half, by occupational classification of adoptive parents.

Classification	
<u>I-II</u>	<u>III-V</u>
+22	+14
+9	+10*
-2	+1
-13	-7
	<u>-13</u>

*Change in scores between 8 and 16; too shy to test earlier.

Later-adopted children were also more likely to have had disruptions in pre-placement history, but again these did not reveal any direct relation to IQ changes. Three children had had unhappy experiences, losing either a "restored" or a foster family and in one case being physically abused, before placement in the family where they were seen at 16. IQ scores of two of these children declined between 4 and 16, by 7 and 18 points, and scores of one child rose by 24 points. From the limited data of this study, then, it appeared that adoptive placement after around age four and a half did not lead to increases in IQ scores with either the speed or the frequency apparent in the earlier placed children.

5.4: Social Class

Although the social class of the adoptive parents showed no relationship to IQ gain in adoptions after age four and a half, more generally social class showed an expectable relation to IQ. A higher proportion of adoptive than "restored" families were middle-class, and this was related to differences in IQ scores at age 16 as it had been at 8. Within the adopted group, the 10 adolescents in families where the breadwinner's occupation was categorised I or II in the Registrar-General's classification of occupations had a mean WAIS Full Scale score of 113.5 (s.d.=6.8), and the six adolescents where the categorisation was III, IV, or V had a mean score of 100 (s.d.=15.3). Analysis of variance showed that this difference was significant ($F=6.22$, $p<0.03$) and similarly for both sub-scale scores.

5.5: Relationship between WAIS score and behaviour difficulty.

At age 8, higher WISC scores were associated with fewer behaviour problems within the adopted and the restored groups. WAIS scores were examined in relation to behaviour problems at 16 measured by the parents' "A" scale, the teachers' "B" scale, and with two combined problem scores derived from the interviews with the parents and with the adolescent respectively. (The latter are described in more detail in Chapter 6.) WAIS score showed no significant correlations with behaviour difficulties in the adopted group. In the small group of restored adolescents, higher WAIS scores were consistently associated with lower problem scores. The association was significant in the case of the two measures based on parental accounts, the "A" scale ($r=0.77$, $p<0.03$, $N=6$) and the score based on the interview with the parent ($r=0.87$, $p<0.005$, $N=8$).

5.6: Relationship between WAIS and attachment to parents.

Within each group, a significant association had been found when the children were aged 8, between higher WISC scores and attachment to the mother. No such correlation was found at age 16 between WAIS score and attachment either to the mother or the father.

5.7: Academic attainments.

At the time of interview, not all the adolescents had yet sat public examinations, and some who had done so were due to sit or resit further subjects. All those adolescents who had examinations still to take at the time of interview were followed up with a letter asking about their results. Not all responded to this request, or gave adequate information. Figure 5.5 shows the percentage of each group attaining each of 4 levels of academic achievement, and demonstrates that the attainments of the ex-institutional adolescents were lower than those of their matched comparisons. However there were no significant differences between adoptees and their matched comparisons, or restored adolescents and theirs, in the proportion with no examination passes.

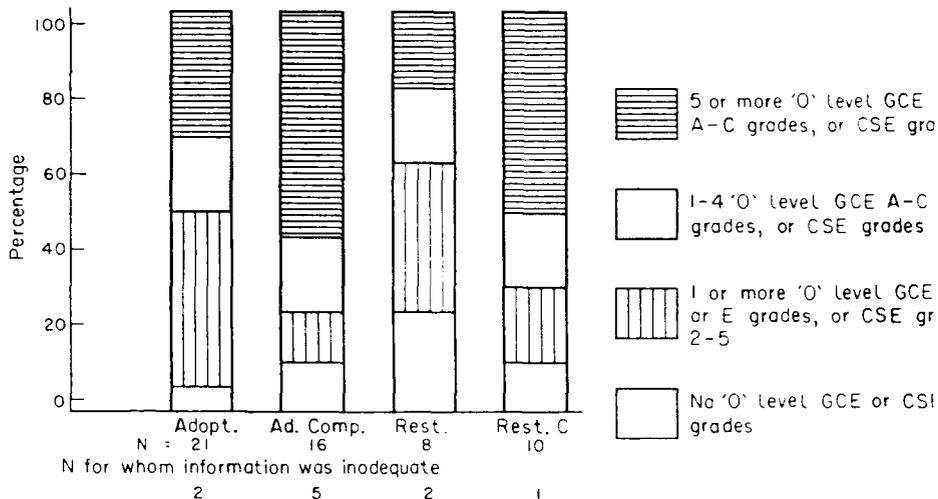


Figure 5.5: CSE and GCE "O" level achievements.

5.8: Summary.

In summary, there was no evidence of a long-term effect of early institutionalisation on IQ. All group mean IQs were at least within the average range, but the adolescents who had been adopted before the age of four and a half maintained the significantly higher mean score which they had shown at ages four and a half and eight. Most of the adolescents adopted after four and a half did not show marked IQ gains. Adoptive families were more often middle-class and this in itself is related to IQ. Within the adopted group higher WAIS scores were associated with fewer behaviour problems as reported by the parents. WAIS scores were unrelated to attachment to parents. Their IQ score notwithstanding, the examination achievements of the adopted group, like those of the restored group, were lower than those of their matched comparisons.

Chapter 6 . Behaviour difficulties at home and at school.

This chapter sets out the findings from the interviews with the adolescents and their parents, and the "A" and "B" scale questionnaires. Excluded from the data presented here are the findings regarding attachments and social relationships, which are given in Chapter 7. This chapter concerns other specific behaviour difficulties and overall levels of adjustment, and will deal first with the information given by the parents, then with that given by the adolescents, and then with that from the teachers "B" scale questionnaire.

6.1: Adjustment according to the interview with the parents; the PIPS scores.

From the interviews with the parents, a "Parent Interview Problem Scale" (PIPS) was computed. This contained 28 items, covering relationships with sibs and peers, specific difficulties with peers, parental anxiety about the adolescents' activities with friends, loneliness, "overfriendly" response to strangers, fears, being "sensible" as opposed to being someone whom the parents would, for instance, feel anxious about leaving on their own or in charge of younger children), impulsiveness, having a "chip on the shoulder", conscience, frustration tolerance, overaffectionate behaviour, attachment to mother and father at 16, and behaviour difficulties at school as seen by the parent. Three items were yes/no choices, the others were rated from the parents answers on a scale of 0-2. The minimum possible PIPS score was 0 and the maximum 47.

Where scores were available for fewer than 20 of the 28 items, a PIPS score was not calculated. This applied to two adoptive parents and one restored parent, with whom only a partial interview could be obtained, and one restored parent who refused to be interviewed.

TABLE 6.1: PIPS scores (Problem scores based on interview with parents) by group.

Group	N	Mean	s.d.
All adopted	21	9.5	7.5
Their comparisons	21	5.7	3.2
All restored	8	11.7	9.2
Their comparisons	10	6.0	3.3
All ex-institutional	29	10.1	7.9
Their comparisons	31	7.8	3.2

Adopted and restored groups did not differ significantly from each other. The adopted group had a significantly higher problem score than their matched comparisons ($F=4.56$, $p<0.04$) and the ex-institutional group as a whole than the total comparison group ($F=3.31$, $p<0.007$).

To investigate whether any particular pattern of difficulties was identifiable, chi-square or where appropriate Fisher's Exact tests were carried out on each individual item by group (including data from the three interviews where scores were available for fewer than 20 items of the PIPS). There were very few individual items on which the groups differed; most were in the areas of peer and family relationships, and are described in Chapter 7. Group differences were revealed in two further items, which were not behaviour problems per se so much as indicators of the existence of problems; these two were whether the adolescent had ever been in any trouble with the police, and whether a referral had been made for psychological or psychiatric help at any time. Table 6.2 shows the numbers in each group in either category and in both.

Table 6.2: Contact with police and psychiatric or psychological referral

Group	Police only	Psychological only	Both police & psychol.	Total N
Adopted	0	3	2	22*
Their comparisons	3	2	0	21
Restored	1	2	5	10*
Their comparisons	1	0	0	10

*For one adolescent, psychological referral not known.

Comparisons for these items were made via Fisher's Exact tests, (1-tailed). Restored adolescents had more often been in some trouble with the police than their matched comparisons ($p < 0.03$) or adopted adolescents ($P < 0.002$). Almost all the restored adolescents had been referred to child guidance or similar services, while none of their comparisons had been referred ($p < 0.001$). Compared with the restored group, significantly fewer adopted adolescents had been referred ($p < 0.02$), a proportion not significantly different from that of their matched comparisons. However, it should be noted that the two children who had suffered adoption breakdowns, as well as the restored girl who was now in a residential unit, had all been referred to psychological or psychiatric services. If these two formerly adopted children are included, making a total of seven out of 23 referred, the difference between them and their comparison group approaches significance ($p = 0.09$).

6.2: Further information from the parents; Rutter "A" scale scores.

The Child Scale A2, completed by the parents, consists of 31 items scored 0-2 concerning aspects of the child's health problems, habits and behaviour (Rutter et al., 1970). Table 6.3 gives mean total scores, including adjusted scores for seven adolescents whose parents had omitted to answer up to a maximum of six items. Four of these adolescents were restored, two adopted, and one an adoptee's matched comparison.

Table 6.3: "A" scale scores.

Group	N	Mean score	s.d.
Adopted	22	6	4.5
Restored	10	11	8.3
Comparisons for adopted	21	5.4	3.3
Comparisons for restored	10	8.1	5.9
All ex-institutional	32	7.6	6.3
All comparisons	31	6.3	4.4

The restored group has a higher mean problem score than the adopted group ($F=4.79$, $p<0.04$). Neither group has a significantly higher score than their matched comparisons.

"Neurotic" and "antisocial" behaviour subscores, each based on five items from the total scale, are shown in Tables 6.4 and 6.5. Scores were not calculated whenever one of these five items was not completed.

Table 6.4: "A" scale, "Neurotic" subscores.

<u>Group</u>	<u>N</u>	<u>Mean</u>	<u>s.d.</u>
Adopted	21	1.1	1.2
Restored	7	1.3	1.3
Comparisons for adopted	21	1.4	1.4
Comparisons for restored	10	2.0	1.4

Table 6.5: "A" scale, "Antisocial" subscores.

<u>Group</u>	<u>N</u>	<u>Mean</u>	<u>s.d.</u>
Adopted	22	0.8	1.4
Restored	8	2.4	2.8
Comparisons for adopted	21	0.3	0.6
Comparisons for restored	10	0.7	1.1

As these tables indicate, the only major difference is on the "antisocial" scale, where the mean problem score of the restored group is significantly higher than the adopted group ($F=5.07$, $p=0.03$). Though of comparable size, the difference between the restored group and their comparison group is not significant ($F=3.39$, $p=0.08$), the comparisons being considerably fewer in number than the group of adoptees. The scores of the nine restored adolescents varied widely, ranging from 0 in 3 cases to 7 in two cases.

6.3: Relationship between "A" scale and PIPS problem score.

The two measures based on the parents' account of the adolescents, the PIPS and "A" scale scores, were significantly correlated for the total group of ex-institutional adolescents

(Pearson product-moment correlation $r=0.65$, $N=29$, $p<0.001$, one-tailed.) The scores were also correlated for the groups separately (adopted group, $r=0.46$, $N=21$, $p=0.02$; restored group $r=0.9$, $N=8$, $P=0.001$).

6.4: Relationship between problem scores at 8 and at 16 years old.

The parent interview at age 8, from which a combined problem score was derived similar to the PIPS at 16, had contained a number of items which at 16 were covered by the "A" scale. The 8-year old problem score was significantly correlated with the "A" scale score in the total ex-institutional group ($r=0.44$, $N=32$, $p=0.003$) and in the restored group ($r=0.80$, $N=10$, $p=0.003$); it was also correlated with the PIPS score for the total ex-institutional group ($r=0.49$, $N=29$, $p=0.003$), the adopted group ($r=0.40$, $N=21$, $p=0.04$), and the restored group ($r=0.73$, $N=8$, $p=0.02$).

6.5: Adjustment according to the interview with the adolescent; the AIPS scores.

The "Adolescent Interview Problem Scale" (AIPS) was based on the interview with the adolescents and computed in the same way as the PIPS score from the parents' interviews. It contained 18 items, covering relationships with teachers, friendships, loneliness, being in trouble at school or elsewhere, parent-child disagreement, relationship with sibs, closeness to parents, worrying, fears, misery and depression, self-depreciation and ideas of reference. The minimum possible score was 1, and the maximum 39. Table 6.6 shows the mean scores by group; N is lower than the total number of cases because in two cases the parent would not allow us to interview the adolescent, and no score was calculated for the two adopted adolescents and one restored where fewer than 14 of the 18 items could be given a definite score.

Table 6.6: AIPS score by group

<u>Group</u>	<u>N</u>	<u>Mean</u>	<u>sd</u>
All adopted	19	18.2	5.8
Their comparisons	21	14.2	5.4
All restored	9	20.1	7.2
Their comparisons	10	11.1	3.3
All ex-institutional	28	18.8	6.2
All comparisons	31	13.2	5.0

As the table indicates, the same pattern of differences is found as in the PIPS score, derived from the interviews with the parents. Analyses of variance showed that there was no significant difference between the adopted and restored groups, but that the adopted group had a higher problem score than their comparisons ($F=5.35$, $p<0.03$), the restored group than theirs ($F=12.78$, $p<0.003$), and the ex-institutional group as a whole than the total comparison group ($F=15.16$, $p<0.003$).

Regarding differences between the groups on particular kinds of difficulty, the restored adolescents reported themselves as having been in trouble in the last year for fighting in school more often than their matched comparisons ($p=0.03$, Fishers Exact test) or the adopted group ($\chi^2=10.5$, $d.f.=4$, $p=0.002$). However, it was the comparison adolescents who tended to be more often critical of their school. Restored adolescents also reported being in trouble outside school more often than the adopted group ($\chi^2=9.6$, $d.f.=2$, $p<0.01$) or their matched comparisons ($\chi^2=7.54$, $d.f.=2$, $p=0.02$).

Though the restored adolescents gave these indications of more "antisocial" behaviour, they also tended to report more marked

misery or depression than comparisons or than the adopted group.

6.6: Relationship between AIPS scores and information from parents and teachers at 8 and 16 years.

The AIPS scores were most strongly correlated with "A" scale scores. (For the whole ex-institutional group, Pearson's $r=0.57$, $N=27$, $p=0.001$; for the adopted group, $r=0.53$, $N=19$, $p=0.01$; for the restored, $r=0.67$, $N=8$, $p=0.04$.) AIPS score was also related to the other measure based on the parents portrayal of the child, the PIPS score (all ex-institutional, $r=0.49$, $N=26$, $p=0.006$); but though strong in the small group of restored adolescents ($r=0.76$, $N=7$), it was not statistically significant in the adopted group. "B" scale scores were not related to the AIPS score, and problem scores when the children were eight years old, whether derived from the parents or teachers accounts, were not predictive of the AIPS score at 16.

6.7: Information from teachers; the Rutter "B" scale.

The Child Scale B2 (Teachers) consists of 28 brief statements about the child's behaviour, each item scored 0-2 and summed to produce a total with a possible range of 0-52. A score of 9 represents the cutoff point when the instrument is used for psychiatric screening (Rutter et al, 1970).

The total "B" scale scores, and scores on the "neurotic" ("Neur") and "antisocial" ("Anti") subscales, are shown in table 6.7. The scores of the ex-institutional groups can be compared with those of both their matched comparisons and their school comparisons. N is less than the total number of cases because a small number of schools did not return the scales, and also a score was not calculated where the teacher had omitted to respond to more than 6 of the 26 items.

Table 6.7: "B" scale mean scores by group

Group	Mean	sd	N	Neur	sd	N	Anti	sd	N
Adopted	8.0	6.8	21	1.6	1.4	21	1.2	1.5	19
School									
comp.s	5.9	7.0	19	1.0	1.2	19	0.9	1.6	18
Matched									
comp.s	2.2	3.7	18	0.3	0.7	18	0.3	0.7	18
Matched c's									
school c's	3.2	3.6	18	1.1	1.4	17	0.2	0.9	18
Restored	14.3	10.1	9	1.7	2.1	9	4.4	3.2	9
School									
comp.s	7.1	10.6	9	1.4	1.8	9	1.7	3.5	9
Matched									
comp's	5.1	4.2	8	1.3	1.4	9	0.3	0.5	9
Matched c's									
school c's	4.9	5.3	8	0.9	1.4	8	0.4	1.1	8

The ex-institutional groups were compared with each other and their comparison groups using a series of 't' tests. The restored group had a significantly higher mean score than the adopted group on the total "B" scale, ($p=0.02$) and the "Antisocial" scale ($p=0.005$). The adopted group had significantly higher scores than their matched comparisons on the total scale ($p<0.002$), "neurotic" scale ($p<0.001$), and "antisocial" scale ($p=0.01$). The restored group scored significantly higher than their matched comparisons on the total scale ($p<0.04$) and the "antisocial" scale ($p<0.005$). The ex-institutional group as a whole showed higher scores than their matched comparisons on the total score ($p<0.001$) and both sub-scale scores ($p<0.005$). There were no significant differences between the scores of any of these groups and their school comparisons, though it may be noted that the adopted and restored groups, unlike their matched comparisons,

showed consistently higher problem scores than their school comparison group. As discussed in Chapter 4, it was possible for parents to self-select out of the pool from which the matched comparison group was formed. This did not apply to the school comparison group, and this may be responsible for lower problem scores in the matched comparisons.

Table 6.8: Number of adolescents scoring below and above cut-off point on "B" scale, by group.

Group	Scoring below 9		9 or above		Total
		%		%	
Adopted	13	62	8	38	21
Their school c's	13	65	7	35	20
Their matched c's	16	89	2	11	18
Matched c's school c's	16	94	1	6	17
Restored	2	22	7	78	9
Their school c's	7	78	2	22	9
Their matched c's	7	78	2	22	9
Matched c's school c's	7	88	1	13	8

As table 6.8 shows, a majority of the restored adolescents scored above the psychiatric screening cut-off point of 9 (chi-square=10.40, d.f.=3, p=0.015). This was not true of the adopted adolescents, who did not differ from their school comparisons. However, both they and their school comparisons show more difficulties than their other comparison groups (chi-square=8.39, d.f.=3, p=0.039). The table gives percentages, despite their incongruity with such small numbers, to facilitate comparisons between groups of different sizes.

6.8: Relationships between problem scores based on parents and teachers accounts at 8 and 16.

"B" scale scores were not correlated with "A" scale or PIPS scores. The 16-year-old "A" scale score was correlated with the 8-year-old teachers' problem score for the total ex-institutional group ($r=0.54$, $p<0.005$) and for the adopted group alone ($r=0.46$, $p=0.02$).

6.9: Relationship between "B" scale scores at 8 and 16.

"B" scale scores at 8 were significantly correlated with those at 16 for the total ex-institutional group ($r=0.39$, $p<0.03$) and the restored group ($r=0.79$, $p<0.01$), but not for the adopted group. Among the adopted group eight adolescents showed very considerable score changes, of 10 points or more, between ages 8 and 16. Five of these showed fewer problems at 16 than previously, and three showed more.

6.10: Differences between groups on specific items.

At 8 years old, there were 12 items on which restored children showed problems significantly more often than their school comparison group. On 11 of these (all but item 4 in table 6.9), the adopted children also differed significantly from their school comparisons. Table 6.9 shows whether there were still significant differences on these items at 16, in relation to both the school comparisons and the matched comparisons. Percentages are given to facilitate comparisons across unevenly sized groups, through incongruous where numbers (see table 6.8) are small. For manageable tabulation, percentages in Tables 6.9 and 6.10 refer to adolescents scoring 1 or 2 ("Applies somewhat" or "Certainly applies" on the "B" scale, as opposed to scoring 0 ("Does not apply")). However, significance levels given (for Tau C) are calculated on the full three categories. Where adolescents

scores fell into two categories only, a Fisher's Exact Test was used.

Table 6.9: "B" scale items which had differentiated the groups from school comparisons at age 8.

(MC=Matched comparison, SC=School comparison)

"B" scale item	Adopted	MC	SC	Restored	MC	SC
1) Restless	33%	11%	26%	50%	33%	*11%
3) Fidgety	33%	*6%	21%	50%	33%	22%
4) Destroys own or others property	10%	0	11%	40%	*0	22%
5) Fights	38%	*11%	*11%	60%	*0	22%
6) Not much liked	43%	17%	26%	70%	33%	33%
8) Solitary	48%	*22%	42%	56%	56%	33%
9) Irritable	48%	**11%	**11%	67%	33%	**0
12) Sucks thumb	0	6%	0	11%	0	0
15) Disobedient	24%	17%	26%	80%	*33%	11%
16) Cannot settle	29%	*6%	21%	56%	*11%	22%
19) Lies	14%	0	21%	80%	**0	**22%
25) Resentful or aggressive if corrected	43%	**11%	42%	70%	44%	*22%

* Indicates $p < 0.05$. ** Indicates $p < 0.01$.

Numbers (N) as in Table 6.8

It is evident that the problems found at age 8 had attenuated somewhat by 16, especially in the adopted group in relation to school comparisons. However, there were also items on which the groups differed significantly at 16 where they had not differed at 8. As Table 6.10 shows, adopted adolescents were more often described as worrying a lot than matched comparisons or school comparisons, more often described as unhappy, as having tics or mannerisms, as over-particular and as fearful than matched comparisons; they were also less

likely to be absent from school for trivial reasons than either comparison group. Restored adolescents were significantly more often described as having stolen during the previous year, and as being unresponsive or apathetic than their matched comparisons.

Table 6.10: "B" scale items newly differentiating ex-institutional adolescents from comparisons at 16.

"B" scale item	Adopted	MC	SC	Restored	MC	SC
7) Worries	67%	**22%	*42%	44%	66%	*44%
10) Unhappy	33%	*6%	16%	44%	22%	22%
11) Tics	24%	*0	16%	22%	0	11%
14) Absent for trivial reasons	0	*17%	**26%	50%	22%	22%
17) Fearful	43%	*6%	32%	33%	33%	44%
18) Overparticular	33%	*0	10%	22%	22%	22%
20) Stolen in past year	0	0	6%	44%	**0	22%
21) Unresponsive	24%	11%	42%	56%	*11%	22%

*Indicates $p < 0.05$. **Indicates $p < 0.01$.

Numbers (N) as in Table 6.8.

6.11: Summary.

In summary, the interviews with the parents and the adolescents themselves found that the restored and adopted adolescents showed more problems than their matched comparison groups, but did not differ significantly from each other. However, the parents' "A" scale, which correlated with the interview data, indicated that restored adolescents showed more difficulties, particularly of an "antisocial" kind, than adoptees, while differences between the ex-institutional group and their matched comparisons were not significant. According to the teachers, the ex-institutional adolescents showed more

difficulties at school than either comparison group, but particularly their matched comparisons (where social class, family type, etc. were comparable). Though some of the difficulties shown in school at age 8 had diminished, the teachers still saw between a third and a half of the ex-institutional group as to some degree restless, distractable, quarrelsome with peers, irritable, and resentful if corrected by adults. Restored adolescents showed particularly great difficulties at school, and tended to show more antisocial types of behaviour, or apathy, while adoptees had come to show more anxious types of behaviour in adolescence. Overall, then, there was evidence that the ex-institutional group had more behavioural and emotional difficulties than comparison children, according to the teachers, the interview with the parents, and the interview with the young people themselves.

Chapter 7 Social and Family Relationships.

This chapter focuses on the adolescents' relationships, both within their families and with peers and other adults outside the family. Many previous studies had suggested that early institutionalisation had particularly damaging effects upon the capacity to make relationships, and so this area of the adolescents' functioning was studied in detail.

At the age of eight, most children (including some placed in families after the age of four and a half) had formed strong attachments to their parents, and this was especially so for the adopted children. But despite this, the ex-institutional children often showed peculiarities of social behaviour in relation to adults, in that they were "overfriendly" and attention-seeking; they also tended to be quarrelsome and unpopular with their peers. It was not easy to predict the form which any remaining difficulties might take at age 16; but since peer relationships become increasingly important during adolescence, and family relationships change as adolescents move towards eventual independence from the family, it was important to gain a detailed picture of peer relationships as well as family relationships.

Here, the findings concerning family relationships will be presented first, followed by those concerning relationships to peers and to adults outside the family. Finally, the question of whether the findings indicate an "ex-institutional syndrome" will be addressed.

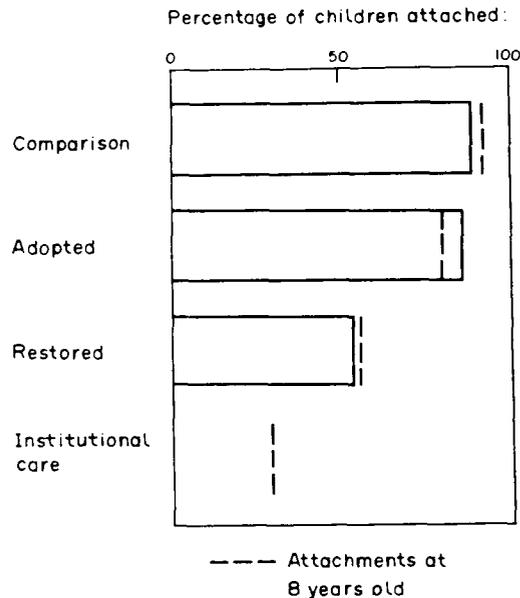
7.1: Attachment to parents.

The mother of each adolescent was asked during the interview whether she felt her child was deeply attached to her now, and whether this had changed since childhood. Similar questions were asked concerning attachment to the father. To explore

the parental attachment to the child, mothers were asked if they found the adolescent easy to love, and whether they found any of their children easier to love than others.

Figure 7.1 shows considerable differences between the groups as regards attachments to the mother.

Figure 7.1: Attachment to mother at 8 and 16.



Similarly to the findings when the children were 8, the great majority of adoptive mothers (17 out of 21) felt that their child was deeply attached to them, and this was true for all their comparisons.

Of the 4 mothers who felt their child was not closely attached to them at 16, one had felt the same when the child was 8. At 16, the relationship seemed mutually rejecting and hostile. The other 3 mothers had described their 8-year-old children as closely attached, but now doubted the strength of their attachment at age 16. One of these mothers felt her son was definitely attached to his father, as at age 8, but was less certain of his attachment to her. The second boy's parents disagreed somewhat over his degree of attachment, his mother feeling he might be happy with anyone who offered him "basic

security, affection, food", his father seeing signs of deeper and more specific attachment. The parents now doubted how strongly he had been attached to them at 8 years old. The third was a child whose parents had had very mixed feelings about his placement with them. At age 8, although they had felt on balance that he was attached to them, they had had their doubts - "I wouldn't be surprised if one day when he was a teenager we woke up and he was gone".

At age 8, four adoptive mothers had felt that their child was not closely attached to them. Two of these adoptions subsequently broke down. In the third, as described above, the mother still felt the adolescent's attachment to her, and her husband, was doubtful. The fourth was a girl who, though not closely attached to her adoptive mother aged 8, had been very attached to her adoptive father. At 16, she was still very attached to him, and her mother felt that her daughter had now become closely attached to her as well - a picture confirmed by the girl's comments.

In contrast to the adoptees, fewer restored 16-year-olds (five out of the nine on whom we had information) were described as deeply attached to their mother.

At 8 years old, six out of 13 restored children were described as not closely attached to their mother or stepmother. The mother of one of these refused to let us visit at 16, and a second mother would not be interviewed herself, although her 16-year-old was interviewed. Two of the others were still not seen as closely attached to the mother or stepmother (or to the father) while the remaining two were now said to be definitely attached to their mother or stepmother. Of the seven who were seen as closely attached at 8 years old, one was now in a secure unit and her mother was not seen, and another family refused our visit. Two adolescents were no longer described as closely attached to their mothers, and

three (including the two singleton restored children) had remained attached.

Seven families in the "restored" group contained other children. Only one of these mothers, but six out of eight comparisons, reported that she found each child as easy to love as the others; five of the other six "restored" mothers preferred a sibling to the restored child. Nine out of 14 adoptive parents, and 13 out of 16 of their comparisons, reported they found their children equally easy to love. Two comparison mothers, and three adoptive mothers, preferred a sibling to the index child. In one of the latter cases, the sibling was also adopted.

Asked whether their child was fond of them in any different way as he or she had got older, or still in the same way as at age 8, more adoptive than "restored" mothers saw their child as equally or more attached to them now. None of the adoptive mothers but three out of nine of the mothers of restored children felt their child was less attached to them now than had been the case at age 8 ($\chi^2=12.3$, $d.f.=3$, $p<0.01$). Developmental changes would be expected between ages 8 and 16; adoptive parents differed from their comparisons in that the latter were much likelier to see the child's attachment as being different, with age, than as having stayed the same or increased ($\chi^2=10.81$, $d.f.=3$, $p=0.01$).

Adopted adolescents were significantly more often said by their mothers to be attached to their father at age 16 than the restored group ($\chi^2=10.41$, $d.f.=2$, $p<0.01$); four out of eight restored adolescents were seen as definitely not attached, as compared to only one out of 20 of the adopted group. The restored group differed similarly from their comparisons. No adopted or comparison adolescents, but two out of five restored adolescents, were said to have become less attached to their father as they grew older.

For comparison, it may be noted that none of the five adolescents who had been seen in residential care at age 8 had a definite attachment to an adult at age 16.

The adolescents were not asked explicitly about attachment to their parents, but were asked who would look after their parents if, as the latter got older, they needed help. Adopted and restored adolescents did not differ from their comparisons, the majority in all groups seeing themselves and their sibs contributing to the care of their parents.

7.2: Sibling relationships.

Table 7.2 shows that the comparison adolescents reported fewer marked problems with sibs than the ex-institutional group as a whole ($\chi^2=8.06, d.f.=1, p=0.03$) and the mothers confirmed this ($\chi^2=7.23, d.f.=1, p=0.01$). The restored group got on particularly badly with their siblings.

This had also been true when they were aged 8. Five out of the nine who had siblings reported having marked difficulties with at least one brother or sister, and their mothers gave a similar picture. Though those adopted adolescents with siblings had fewer problems with them, the difference was not significant. The adopted group had more problems than their comparisons but not significantly so, while the restored group and their mothers both reported significantly more problems than their comparisons (Fishers Exact test, $p=0.01$ for adolescents, $p=0.03$ for parents).

Where the child had sibs, the mother was asked whether she felt that the study child would remain in touch with the sibs when they had all grown up and left home. To this hypothetical question, none of the comparison mothers responded that the child would probably lose touch, but four of a total of 19 mothers of the ex-institutional group did.

Table 7.2: Relationships with siblings.

Adolescents's interview			Parent's interview	
No/slight problems	Marked problems	Group	No/slight problems	Marked problems
9 (75%)	3 (25%)	Adopted	9 (64%)	5 (36%)
15 (94%)	1 (6%)	Their comparisons	14 (88%)	2 (13%)
4 (44%)	5 (56%)	Restored	3 (45%)	4 (57%)
8 (100%)	0	Their comparisons	8 (100%)	0
13 (62%)	8 (38%)	Adopted & Rest'd.	12 (57%)	9 (43%)
23 (96%)	1 (4%)	All comparisons	22 (92%)	2 (8%)

7.3: Showing affection.

At age 8, adopted children, alongside those still in institutional care, were the most affectionate and "cuddly", and restored children strikingly the least so. When the children were 16, the mothers were asked if their son or daughter found it easy to be affectionate to them, for instance to give them a cuddle or a kiss (Table 7.3).

Table 7.3: Adolescents' physical affection to parents

	Adopted	Their com- parisons	Rest'd	Their com- parisons
Never or rarely	9 (41%)	5 (24%)	7 (70%)	1 (10%)
Routine times only	1 (5%)	2 (10%)	0	2 (20%)
Some spontaneous affection/ very affectionate.	12 (55%)	14 (67%)	0	7 (70%)

As they grew older, 10 of the 22 adopted children had become less demonstratively affectionate, and as a group they were not significantly more so at 16 than their matched

comparisons. The restored group, however, had remained strikingly less affectionate - less than the adopted group (chi-square=10.18, d.f.=2, $p < 0.01$) and less than their own matched comparisons (chi-square=11.7, d.f.=2, $p < 0.005$). Seven out of 10 restored adolescents were said to show affection never or rarely, but only one comparison; seven out of 10 comparisons showed at least some spontaneous "out of the blue" affection, but not one of the restored group did. Unlike their comparisons and the adopted group, most restored adolescents were described as less demonstrative than their siblings.

The finding that the adopted adolescents more readily showed affection to their parents than restored adolescents is paralleled by how readily the parents showed physical affection to the adolescent (Tables 7.4 and 7.5). There was a clear, though not statistically significant, tendency for adoptive parents to find it easier to show affection to their 16-year-olds than parents of restored adolescents. This difference was especially marked as regards the fathers (at least according to the interview which was usually with the mother alone). Fathers of restored adolescents also showed affection less readily than their matched controls, although this comparison involves very small numbers. Fathers of restored children had also found it more difficult than adoptive fathers to show affection when the child was 8, according to report at 16.

Table 7.4: Mothers' physical affection to adolescent

	Adopted	Their comparisons	Restored	Their comparisons
No difficulty in showing affection	10 (46%)	11 (52%)	2 (22%)	3 (30%)
Some difficulty	6 (27%)	8 (38%)	2 (22%)	5 (50%)
Considerable difficulty	6 (27%)	2 (10%)	5 (56%)	2 (20%)

Table 7.5: Fathers' physical affection to adolescent

	Adopted	Their compa- risons	Restored	Their compa- risons
No difficulty in showing affection	6 (30%)	10 (48%)	0	4 (44%)
Some difficulty	8 (40%)	5 (24%)	2 (29%)	3 (33%)
Considerable difficulty	6 (30%)	6 (28%)	5 (71%)	2 (22%)

7.4: Similarity and assimilation.

The extent to which the adopted child is seen as resembling other family members has been considered (e.g. Raynor, 1981) an important element in parental satisfaction and the integration of the child into the family. The parents were asked whether the adolescent "took after" anyone in the family. Six out of 21 (29%) adoptive mothers said no, compared with three out of 20 (15%) of comparisons. When asked this question, 13 out of 21 of the adoptive mothers reminded the interviewer in some way that their child was not biologically related to them, but this did not preclude a feeling of resemblance. Eight of these 13 mothers also saw their child as "taking after" someone in the family, and a further three also saw resemblances but were more guarded, saying for instance that their child had "picked up mannerisms" from them. Most of the restored group and their comparisons were said to "take after" someone in the family.

No differences were found between ex-institutional and comparison groups in how far the parents felt that their child's views, on fundamental issues, coincided with their own, or in how far they felt the child would, as an adult, resemble them in attitudes, personality or lifestyle. In these respects, the adopted and restored adolescents were seen

as just as much of a piece with their families as other adolescents.

The great majority of adopted adolescents did not refer to being biologically unrelated when asked about possible similarities between themselves as adults and their parents.

About a half of both adopted and restored adolescents thought they would be like, and a half unlike, their parents, but ex-institutional adolescents opted for extremes significantly more often than their matched comparisons (chi-square=8.73, d.f.= 3, $p < 0.03$). Around 10% thought they would be "very like" their parents, and around 20% of the adopted and 35% of the restored group thought they would be "very unlike". When asked about similarity to mother and to father separately, the adolescents showed this pattern more strongly in relation to their mother than their father, significantly so in the case of restored adolescents (chi-square=12.07, d.f.=4, $p = 0.02$).

7.5: Confiding and support.

As Table 7.6 shows, a majority of all the groups of mothers believed they knew when their son or daughter was upset; and the adolescents felt the same. Though "restored" mothers were less certain than others, their doubts were not matched by their children. According to the mothers, around 70% of the adolescents would ask them for support or advice over some, but not all, problems, and over half of the adolescents themselves felt that they would do so. The mothers were asked if the adolescents could confide in a parent if anxious. There was no indication that the study adolescents were less able to turn to their parents than the comparisons who had always been in their families.

Table 7.6: Issues relating to closeness with parent, confiding and support.

		Their compa- Adopted	risons Restored	Their compa- risons
Mother believes adolescent would confide over at least some anxieties	17 (85%)	19 (91%)	8 (80%)	8 (80%)
Mother feels she would realise if adolescent was upset	16 (84%)	16 (76%)	5 (56%)	8 (80%)
Adolescent feels parent would realise if upset	13 (65%)	15 (71%)	8 (80%)	6 (60%)
Parent feels adolescent would ask for support	13 (72%)	14 (67%)	7 (78%)	7 (70%)
Adolescent feels s/he could ask for support	11 (58%)	12 (57%)	5 (51%)	6 (64%)

The mothers were asked whether their 16-year-old would confide in anyone if they felt depressed or miserable. Table 7.7 again indicates that the adopted and restored groups did not differ greatly from their comparison groups in the proportion who would turn to a parent. The table suggests that a higher proportion of adopted and restored adolescents than their comparisons would not confide in anyone, and that fewer, at least of the adoptees, would confide in a peer. This finding is discussed further in section 7.11 below. Adopted and restored groups did not differ significantly.

Table 7.7: Parents' views; who would the adolescent confide in if feeling miserable?

<u>Confide in</u>	<u>Adopted</u>	<u>Their compa- risons</u>	<u>Restored</u>	<u>Their compa- risons</u>
Nobody	5 (25%)	1 (5%)	2 (22%)	0
Parent	12 (60%)	9 (47%)	3 (33%)	4 (40%)
Other family member	0	1 (5%)	0	1 (10%)
Outside adult	0	0	1 (11%)	0
Peer	1 (5%)	6 (31%)	3 (33%)	4 (40%)
N/A-never very unhappy	2 (10%)	2 (11%)	0	1 (10%)

The adolescents were also asked who, if anyone, they would confide in if worried about a range of 9 hypothetical concerns. These were: if they felt very miserable; if anxious about their appearance; if worried that something was wrong with them; if worried about not being liked by the opposite sex; if they felt something was wrong with their body; if they were in severe financial difficulty; if they were unhappy over their girlfriend or boyfriend; if they needed to know about contraception; and if they became pregnant, or made someone pregnant, without wishing to.

Different anxieties tended to propel the adolescents toward different confidants. For instance, 75-80% in all groups said they would turn to a parent over financial difficulty; only one ex-institutional adolescent and two comparisons, though, would confide in a parent if worried about not being liked by the opposite sex. This was an anxiety which adolescents kept to themselves, disclaimed, or shared with a peer, the latter more so for the comparisons than for the ex-institutional group. The responses to all 9 hypothetical

questions were pooled to provide a composite picture of who the adolescents would turn to when anxious (Table 7.8).

Table 7.8: Adolescents' views; who would they confide in?

Confide in	Adopted	Their compa- risons	Restored	Their compa- risons
Nobody	28%	17%	23%	22%
Parent	44%	39%	43%	35%
Other family member	2%	5%	4%	1%
Outside adult	6%	5%	8%	6%
Peer	16%	30%	17%	33%
N/A-not worried	3%	4%	5%	3%
(Total number of responses)	(177)	(191)	(96)	(89)

As with the findings above, the adopted and restored adolescents indicated that they were at least as likely to turn to their parents as comparisons who had always lived in their families. However, they were less likely than comparisons to turn to their peers, and this is discussed further in section 11 below.

The adolescents were also asked who they thought knew them best as a person, and who they would want to tell first if they had good news. About half of the adopted and restored adolescents saw their parents in these roles, and they did not differ significantly from their comparisons.

7.6: Disagreements over control and discipline.

Disagreements over the adolescent's appearance (dress or hairstyle) were rare in all groups, according to the adolescents and their mothers alike. Parents either approved of their child's appearance, or at worst tolerated it. Disagreement over activities - staying out in the evening, getting homework done, helping round the house - or over

pocket money was significantly less frequent in adoptive families than in their comparisons, according to the parent (chi-square=11.13, d.f.=2, p=0.005), though there was no significant difference according to the adolescents. Restored adolescents, but not their parents, reported significantly more rows than their comparisons (chi-square=5.63, d.f.=1, p<0.02). The data are summarised in Table 7.9.

Table 7.9: Disagreements over adolescent's activities.

Adolescents' interview: Altercations in last month				
	0	1	2/3	Weekly or more often
Adopted	8 (44%)	4 (22%)	4 (22%)	2 (11%)
Their comparisons	13 (62%)	1 (5%)	3 (14%)	4 (19%)
Restored	4 (44%)	1 (11%)	2 (22%)	2 (22%)
Their comparisons	9 (90%)	1 (10%)	0	0

Parent's interview: Altercations in last 3 months			
	0-2	3-11	Weekly or more often
Adopted	15 (79%)	2 (11%)	2 (11%)
Their comparisons	6 (29%)	3 (14%)	12 (57%)
Restored	4 (50%)	1 (13%)	3 (38%)
Their comparisons	5 (50%)	3 (30%)	2 (20%)

Like the mothers, the adolescents generally described few arguments; over half of the ex-institutional adolescents recalled none or only one in the month prior to interview, though two adopted adolescents described arguments occurring at least once in a week, and two restored adolescents described almost daily rows.

Roughly a third of the study adolescents saw their parents as less strict than average, another third as average, and another third as stricter in at least some ways. These

proportions were not significantly different from their comparison group.

As regards their attitude to parental rules and level of control, there were no adolescents who felt they were subject to insufficient parental control. Thirteen out of 19 adopted adolescents felt the level of control was about right, no differently from their comparisons. Six out of 11 restored adolescents felt the same, but five felt their parents were too strict with them in at least some areas. This represents significantly more dissatisfaction than among their comparisons ($\chi^2=5.97$, $d.f.=2$, $p=0.05$).

7.7: Involvement in the family.

The mothers were asked how much the 16-year-old spent time with the family as opposed, for example, to staying out of the house a lot or withdrawing to his or her room for long periods. The adoptive mothers saw their 16-year-old as more involved in the family than did mothers of restored adolescents, but neither group differed significantly from their matched comparisons (Table 7.10).

Table 7.10: Adolescents' involvement in family activities (Parents interview).

	Very much involved	Sometimes withdraws, appropriately	Withdraws considerably
Adopted	5 (28%)	11 (61%)	2 (11%)
Their comparisons	5 (24%)	12 (57%)	4 (19%)
Restored	1 (11%)	4 (44%)	4 (44%)
Their comparisons	0	8 (80%)	2 (20%)

According to the ex-institutional adolescents, about 40% of them very rarely went out together with parents, and the adopted and restored groups did not differ from each other.

Comparison adolescents went out together with their parents more than the ex-institutional adolescents (chi-square=14.52, d.f.=4, $p < 0.01$). This was true for both the adopted and the restored groups, especially so for the latter, although separately the differences between these groups and their comparisons were not significant (Table 7.11)

Table 7.11: Going out with parents (Adolescent's interview).

	No/very rarely	Yes, not in last month	1-3 times in last month	1/week or more in last month
Adopted	8 (42%)	3 (16%)	5 (26%)	3 (16%)
Their comparisons	4 (19%)	4 (19%)	12 (57%)	1 (5%)
Restored	4 (50%)	2 (25%)	1 (13%)	1 (13%)
Their comparisons	1 (10%)	2 (20%)	7 (70%)	0

One restored adolescent had been living away from his parents over the past month.

Most 16-year olds said they felt consulted "enough" about family decisions; but how much is "enough" depends of course on how much the adolescent wanted to be consulted. Adopted adolescents wanted more consultation than restored ones- 14 out of 19 adopted adolescents, versus 2 out of 9 restored, said they definitely wanted to be consulted (chi-square=12.68, d.f.=4, $p = 0.01$). Only one out of 19 adopted, but four out of 9 restored adolescents, maintained that they definitely did not want to be consulted about decisions such as where the family should go for an outing or a holiday. Comparison adolescents were even clearer in their wish to be consulted; the difference was not significant for the adopted group and their comparisons, but was very marked for the restored group.

Two out of 9 of them, but 7 out of 10 comparisons, definitely wanted to be consulted (Fisher's Exact test, $p = 0.04$).

7.8: Peer relationships; overall ratings.

On the basis of the account given by the mothers in answers to five open-ended questions, plus questions about specific difficulties, a rating was made of the 16-year-olds' peer relationships over the past year. Another rating was made on the basis of the interview with the 16-year-olds, who also completed a 46-item self-report questionnaire on social difficulty (Lindsay and Lindsay, 1982). The questionnaire sent to teachers also asked them to rate whether, in comparison to classmates, the adolescents were more popular than average with peers, about average, or less popular.

The rating scales from the parents' and adolescents' interviews were dichotomised to compare the proportion of adolescents with average and better-than-average peer relationships with the proportion who had some significant problems or worse. The adopted group did not differ from the restored, but as a group the ex-institutional adolescents were more often rated as having difficulty in their peer relationships than their matched comparisons, both according to the mothers' interview and according to the 16-year-old's interview. Rather fewer 16-year-olds were seen as experiencing difficulties on the basis of their own account of their peer relations (12 out of 31 of the ex-institutional group and 4 out of 31 of their matched comparisons, $\chi^2=5.39$, $d.f.=1$, $p<0.02$) than on the basis of their mothers' perception (17 out of 31 of the ex-institutional group and 7 out of 31 comparisons, $\chi^2=5.51$, $d.f.=1$, $p<0.02$).

No significant differences between groups were apparent on the self-report social difficulty questionnaire as regards overall problems or problems specifically with peers.

The teachers' assessments also indicated that the adopted and restored adolescents did not differ from each other, but the

ex-institutional children did differ as a group from their matched comparisons (Table 7.12). Considerably more ex-institutional adolescents were rated "less popular than average with peers", although slightly more were also rated as "more popular" (chi-square=7.36, d.f.=2, $p < 0.025$). There was a similar but not statistically significant difference between the ex-institutional group and their school comparisons. The teacher's questionnaire also indicated that the ex-institutional group tended significantly more often than their matched comparisons to be left till near the end when their classmates were choosing teams or groups, or to be objected to as a partner if paired with classmates by the teacher for a task or activity (chi-square=5.81, d.f.=2, $p = 0.05$).

Table 7.12: Teachers' assessment of popularity with peers.

	Less popular than average	Average	More popular than average	N
All ex- institutional	12 (39%)	12 (39%)	7 (23%)	31
Matched comparisons	4 (15%)	20 (74%)	3 (11%)	27
School comparisons	2 (21%)	18 (64%)	4 (14%)	28

7.9: Specific difficulties with peer relations.

Given that peer relationships were more frequently rated as poor among the ex-institutional adolescents, the question arises as to whether specific types of difficulty can be identified which led to these poorer overall ratings. Few such indicators emerged from the parents' interviews. One difference which did appear between ex-institutional and matched comparison groups was a lack of selectivity towards peers. Unlike any of the comparisons, six out of 30

ex-institutional adolescents were definitely said to be "friendly with anyone who's friendly towards him/her" in regard to peers, as opposed to "choosing his/her friends", and another seven parents were uncertain if this was true of their child or not (Kendall's tau C=-0.433, $p<0.001$).

No significant differences were found between groups in how often they had seen friends over the previous week, how many different friends they had seen, or the number of visits to or from friends. There were no differences either in contacts with opposite sex friends or in whether or not the adolescent currently had a boyfriend or girlfriend. According to the parents, 30% of the ex-institutional adolescents and 24% of comparisons definitely had a current boy- or girl-friend; similar figures, about 5% higher, were given by the 16-year-olds themselves. Ex-institutional adolescents reported themselves less often than their matched comparisons as belonging to a "crowd" of young people who generally went around together. The difference was more marked between the adopted group and their matched comparisons than between the restored group and theirs, and was statistically significant only in the former (chi-square=6.4, d.f.=1, $p<0.01$).

The Rutter "B" scale and the teacher's questionnaire gave some indications of specific kinds of peer difficulties. Teachers rated the ex-institutional adolescents significantly more often as quarrelsome (Kendall's tau C=0.28, $p=0.01$) and as less often liked by other children (tau C=0.21, $p<0.05$) as against their school comparisons, and also as against their matched comparisons (tau C=0.35, $p<0.002$ and tau C=0.28, $p<0.02$ respectively). Teachers also saw the ex-institutional group as bullying other children more than the matched comparison group (tau C=0.24, $p<0.01$).

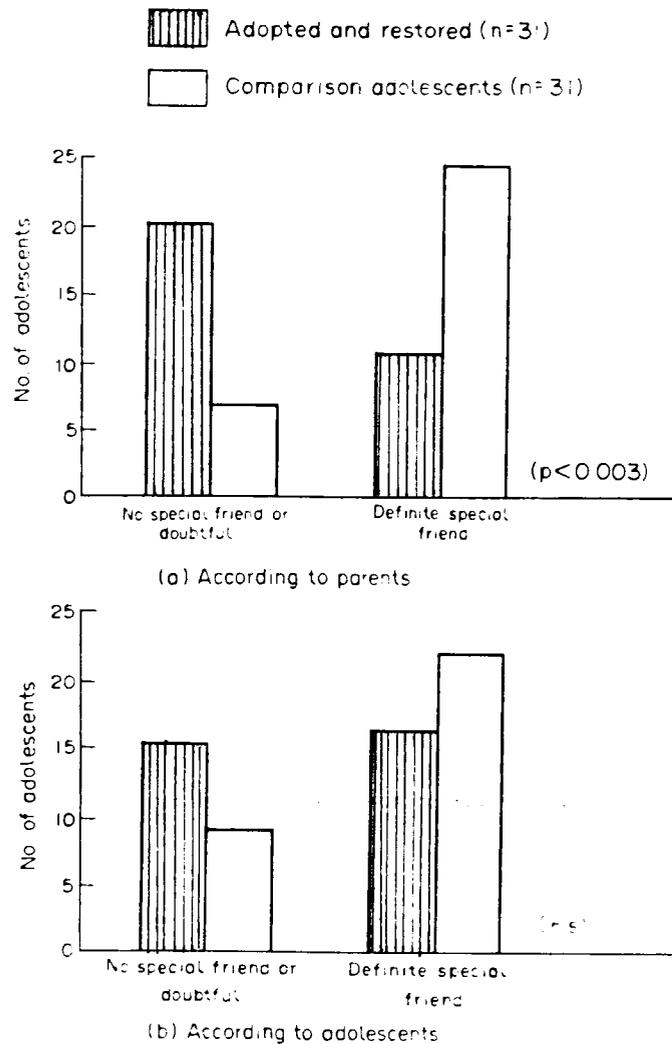
7.10: Special friends.

One major dimension of difference between the ex-institutional adolescents and their comparisons lay in whether the adolescent had a special friend of the same sex. According to the parents' interview, the ex-institutional adolescents were markedly less likely to have a definite special friend than their comparisons (chi square=9.45, d.f=1, $p<0.002$). Twenty-four of the 31 matched comparisons, but only eleven out of 31 of the ex-institutional adolescents definitely had such a friend. Adopted and restored groups each differed significantly from their matched comparison groups when compared separately ($p=0.04$ and $p=0.02$ respectively), but they did not differ from each other. The responses of the 16-year olds themselves revealed the same pattern but to a less marked extent (Figure 7.13). About half the ex-institutional group felt they definitely had a special friend. They did not differ significantly from their comparisons, although more comparison adolescents felt they definitely had a special friend, and more ex-institutional adolescents felt they definitely did not.

Disparities between the adolescents account and that of their parents as to how definitely they had a "special" friend, were much more common among ex-institutional than comparison adolescents; 14 cases out of 29 as compared to 7 cases out of 31. Among the ex-institutional adolescents, 13 of these 14 disparities arose where the adolescent was more definite about having a special friend than the parent was; while among the comparisons, this was only true of 3 of the 7 disparities. This suggests that ex-institutional adolescents, unlike comparisons, may have reported friendships as "special" which lacked something which parents regarded as part of the definition of a "special" friend. It is also possible that parents of ex-institutional adolescents knew less about their

friendships than comparison parents, or under-reported "special" friendships for some reason.

Figure 7.13: Number of adolescents with special same-sex friend.



The questionnaire to teachers asked whether or not the adolescent had one or two particular friends. Teachers may be less likely to know at secondary school level than at primary level, and indeed between 15% and 20% of teachers indicated that they did not know, or gave no answer to this item. Of those for whom answers were given, the majority of adolescents were reported to have such a friend, and there were no

significant differences between the ex-institutional and comparison groups.

7.11: Confiding in peers.

One way in which a friendship can be defined as "special" is in its degree of closeness, and one measure of this is how readily the adolescent confides in the friend. As described in section 5 above, ex-institutional adolescents were less likely to confide in peers than their matched comparisons were. As indicated in Table 7.8, 16-17% of ex-institutional adolescents, but 30-33% of their matched comparisons said they would confide in peers, when asked about a range of nine issues (chi-square=4.29, d.f.=1, $p < 0.04$, 2-tailed). Taking those issues individually, ex-institutional adolescents were significantly less likely to turn to peers for the following examples: feeling miserable or unhappy (13% of ex-institutional adolescents and 43% of comparisons, chi-square=7.13, d.f.=1, $p < 0.01$, 2-tailed); being worried that something was wrong with them (3% of ex-institutional adolescents and 19% of comparisons, chi-square=3.85, d.f.=1, $p < 0.05$); and being concerned about contraception (14% of ex-institutional adolescents and 39% of comparisons, chi-square=4.44, d.f.=1, $p < 0.04$).

Thus in respect of confiding, the ex-institutional adolescents did not look to their peer group for support to the same extent as the comparison adolescents. Since the ex-institutional group were less likely to have a special friend, the question arises whether comparison adolescents as a group confide more in peers simply because more have special friends in whom to confide. If this were so, no differences in confiding should be apparent between ex-institutional and comparison groups if only those adolescents with a special friend are included in the analysis. However, this was not the case. Taking first the adolescents said by their parents to have a definite special friend, a significantly greater

proportion of comparison adolescents than ex-institutional adolescents said they turned or would turn to peers if feeling miserable, instead of saying nothing or turning to someone other than a peer (chi-square=4.93, d.f.=1, $p<0.03$). This pattern was consistent for eight of the nine hypothetical instances given as examples. Similarly, taking all those adolescents who described themselves as having a special friend, comparisons would turn more to peers than the ex-institutional adolescents in seven of the nine instances, significantly more so if they felt miserable (chi-square=9.34, d.f.=1, $p=0.002$) or were concerned about contraception (chi-square 3.99, d.f.=1, $p<0.05$).

7.12: Relationships between attachment and peer relations.

The ratings of the 16-year-old's current peer relationships were not related to attachment to the mother at 16. However, 16-year-olds who at 8 had been described as closely attached to their mothers had better peer relationships at 16 than those who had^{not} been attached at 8, significantly so according to the peer rating from the interview with the 16-year-old ($\tau C=0.32$, $p<0.04$), but not significantly so according to the rating from the parent's interview.

One aspect of peer relationships at 16 was related to the attachment to the mother. Adolescents who were closely attached to the mother at 16 were less likely to be described as unselectively friendly towards peers ($\tau C=.247$, $p<0.04$). Close attachment at 8 was similarly and even more strongly related to selectivity in peer relations in adolescence ($\tau C=.504$, $p<0.002$).

7.13: Relationships between current and earlier peer relationships.

Whether the adolescent had a same-sex special friend bore no apparent overall relationship to the pattern of peer relationships at age 8.

Adolescents who at age 8 had been seen as "solitary through choice" were enjoying generally good peer relationships at 16, according to the ratings from both the 16-year-olds and the parents interviews. Those who at 8 had seemed to want to be friends but whom other children would not befriend had rather more difficulties at 16. The seven adolescents who at 8 had been described as having a small group of special friends were doing less well, particularly according to the parents. Three of this latter group were also among the five adopted and restored adolescents described as unselectively friendly towards peers at 16. The one child described at age 8 as having a large diffuse group of friends had very severe difficulties in peer relationships at 16.

7.14: Overfriendly behaviour.

At age 4, indiscriminately friendly behaviour towards adults had characterised the behaviour of some institutional children. This was much attenuated by age 8, but still present in some children. The natural history of this "overfriendliness" was further explored at 16, when the parents were asked to describe how their adolescent child would usually react if an adult whom they did not know came to the house - someone whom the parents might know, but whom their child had not met before. Of the 11 adolescents who had been rated "overfriendly" at the age of 8, two were still seen as exceptionally friendly and keen to get attention from an adult at 16, and so were two who had not been "overfriendly" at 8. However, their behaviour was socially

acceptable and did not worry the parents as it usually had done at age 8. Of the remaining 9 adolescents who had been "overfriendly" 8-year-olds, 5 were described as neither shy nor overfriendly, but polite or friendly. Two were said to be "not interested", tending to ignore the stranger, though not especially shy. Two more were no described as shy or reserved with a stranger, taking a long time to become friendly. All in all no relationship was found between whether or not the children were "overfriendly" at age 8, and how friendly they were towards strangers at 16.

In contrast, as table 7.14 indicates, there was a significant association between "overfriendliness" to adults at age 8 and the unselective friendliness towards peers at 16 outlined in section 9 above ($\tau C=0.5179$, $p<0.002$) This latter feature of behaviour, more common in the ex-institutional group, was not in general seen as a problem by the parents.

Table 7.14: Relationship between indiscriminate overfriendliness towards adults at 8 and selectivity towards peers at 16.

	<u>All ex-institutional adolescents</u>			Total
	Generally chooses friends at 16	Rating dubious	Friendly to any peer	
Not overfriendly to adults at 8	16 (70%)	6 (26%)	1 (4%)	23
Overfriendly to adults at 8	2 (20%)	3 (30%)	5 (50%)	10

7.15 Relationships to teachers.

As 8-year olds, the ex-institutional children were seen by their teachers as trying more than most children to get attention both from their teachers and from a stranger entering the classroom. They differed both from their classmate comparisons and from the then comparison group.

According to the teachers, the ex-institutional group at 16 was still seen as "trying to get a lot of attention from adults" more often than the school comparison group (chi-square=4.11, d.f.=1, $p<0.05$), but not significantly more than their matched comparisons. About half the ex-institutional adolescents were also said to have marked likes or dislikes of particular teachers, compared to about 20% of the school comparisons (chi-square=5.85, d.f.=1, $p<0.02$) and 10% of the matched comparisons (chi-square=10.95, d.f.=1, $p<0.001$). Adult approval was seen as especially important for half the ex-institutional adolescents and under a fifth of their matched comparisons (chi-square=4.96, d.f.=1, $p<0.03$). As regards their relationships with teachers, there were significant differences between the ex-institutional groups only as regards aggression; the restored 16-year-olds were more often aggressive than the adoptees (chi-square=6.5, d.f.=2, $p<0.04$) and than either their matched comparisons (chi-square=7.77, d.f.=2, $p<0.02$) or their school comparisons (chi-square=5.63, d.f.=2, $p=0.05$).

7.16: An ex-institutional "syndrome"?

The preceding sections in this chapter have indicated that while there were differences between the adopted and restored groups as regards their family relationships, such differences were not found as regards social relationships with peers and adults outside the family. Here, the two ex-institutional groups resembled each other, while differing

from their matched comparisons who had never been in institutional care.

These differences between the ex-institutional and the comparison adolescents can be summarised as follows; ex-institutional adolescents were

- 1) more often adult-oriented
- 2) more likely to have difficulties in peer relations
- 3) less likely to have a special friend
- 4) less likely to turn to peers for emotional support if anxious
- 5) less likely to be selective in choosing friends.

Does this pattern emerge at the individual as well as at the group level, forming a characteristic syndrome?

Summarising the data from adolescents, parents and teachers, a score was constructed for each adolescent in each of the five areas listed, indicating the presence or absence of the behaviour characteristic of the ex-institutional group. The constructed scores revealed no new differences between adopted and restored adolescents, i.e. within the ex-institutional group. Table 7.15 indicates how many individuals in the ex-institutional and comparison groups showed these characteristics. Very few ex-institutional adolescents, and no comparisons, showed all five. However, almost half the ex-institutional adolescents, but only one comparison, showed four out of five characteristics.

Table 7.15: Number of "Ex-institutional" characteristics.

	Number of characteristics						N
	0	1	2	3	4	5	
Ex-institutional	0	5	3	5	11	2	26
		(19%)	(12%)	(19%)	(42%)	(8%)	
Matched comparisons	8	6	5	4	1	0	24
	(33%)	(25%)	(21%)	(16%)	(4%)		

Tau C=-0.65, $p < 0.0001$

In so far as these ex-institutional characteristics do form a "syndrome", how far is this related to more general behavioural and emotional disturbance? "A" scale scores were unrelated. Adolescents who showed more ex-institutional characteristics tended to have higher "B" scale scores (ex-institutional adolescents, $\tau C=0.37$, $p=0.01$; comparisons, $\tau C=0.39$, $p=0.01$). Ex-institutional adolescents with more of these characteristics were more likely than those with fewer to have been referred to child psychiatric or psychological services ($\tau C=0.4$, $p=0.03$) but were no more likely to have been in trouble with the police.

7.17: Summary.

In contrast to the generally satisfactory family attachments and relationships of the adopted adolescents, which differed little from non-adopted comparisons, the restored group suffered many more difficulties than either the adoptees or their own matched comparisons. Attachments between parent and adolescent were less common in the restored group, as were expressions of affection; parents tended to prefer other children to the restored child, and sibling relationships, though an area of some difficulty for the adoptees, were very much more difficult in the restored group.

However the adopted and restored groups, so unlike each other regarding family attachments and relationships, showed common features in their relationships to peers and to adults outside their family. They were more oriented towards adult attention, and had more difficulties with peers and fewer close or confiding peer relationships, than matched comparison adolescents who had never been in institutional care.

Chapter 8 Discussion.

8.1: Introduction

At the simplest level, continuities in behaviour may merely reflect the continuation of the type of environment which produced the behaviour in the first place; Clarke and Clarke (1976) argued that no conclusions were possible concerning the effects of early environment "unless it can be positively shown that there was a significant discontinuity between early and late environmental circumstances" (p.271). In addition, when the environment does change, exposure to one poor environment may increase the probability that another will follow. One way in which this may occur is through the individual effectively "selecting" another poor environment as the result of the experience of the first. For example, Rutter and Quinton (1984; Rutter, 1989) discussed the way in which girls brought up in institutions were more likely to act so as to bring further environmental difficulties upon themselves, such as poor housing and stressful marital relationships.

The "natural experiment" of the present study provided the relatively unusual case of a radical and well documented discontinuity in the environment, and one moreover which was not determined by the experience and characteristics of the individual children concerned. It was clear that this change of environment had extremely important effects, and that the kind of family the children entered was a very major determinant of much of their subsequent development, including IQ, family relationships, and aspects of general adjustment. The broad picture painted by these findings is that it is possible for children institutionalised for the earliest years of their lives to differ from others very little if at all by the time they are in mid-adolescence. However, the details as well as the broad canvas are important. School behaviour

difficulties and atypical social behaviour, shown in middle childhood and adolescence by not all but a significant number of ex-institutional children, appeared to be linked to the experience of institutionalisation in their early childhood, and to be evident despite the intervening years of family life.

What do these findings imply for the questions - described in chapters 1-3 - which have been explored and developed since the 1930's? There is the general question of whether early institutional care has an effect on subsequent development, and the more specific questions of which aspects of the institutional environment are important, which aspects of later functioning are affected and in what way, and whether there are periods of early development in which vulnerability is greater. Another question concerns which theoretical models account best for the findings.

8.2: Longterm effects of early institutionalisation upon IQ and academic attainment.

First, in this study institutional rearing clearly did not have the devastating long-term effects upon IQ described in some earlier studies. This is no different from other studies carried out post-war in metropolitan countries, but contrasts sharply with earlier studies such as most of those reviewed by Bowlby (1951), as well as with relatively recent studies in less developed countries, such as those by Dennis in the Lebanon. Goldfarb (1943b), for example, had found in the United States that 10-14-year-olds who had had early institutional care for approximately 3 years before foster placement had a mean Wechsler-Bellevue full scale score of 72, and all their scores were below 90. None of the groups in the present study, institutional or ex-institutional, had mean IQs of less than 94. Why should the present study, like other more recent studies, show such a different outcome from the early ones?

The explanation of the much improved performance of the children in the present study is most likely to lie in their adequately stimulating and well provided nursery environment (detailed in Chapter 3), endorsing the view that environmental understimulation played a large part in the intellectual retardation found by early studies of children from poor institutions. It is clear that a normal level of intellectual development was attained despite the absence of close continuous attachment relationships in the first two-plus years. It is more difficult to draw specific conclusions about which aspects of the improved institutional settings were responsible for the higher IQ scores, because the institutional settings described by Tizard were better on so many dimensions simultaneously than what is known of the earlier institutions. They offered much more stimulation in almost all possible ways. As noted in Chapter 2, despite earlier debate over whether perceptual stimulus deprivation or lack of "mothering" underlay impaired cognitive development, it is probably not useful, or practicable, to separate "perceptual" from "social" stimulation as regards young children's experience; and it should be emphasised that although caregiving in these institutions was emotionally detached and short-term, still "social stimulation" was not lacking as it had been in the nurseries described by Spitz or Dennis, for example.

In attempting to look at which dimensions of experience may have mattered for IQ development, it is worth noting that adequate conditions for language development may be of particular importance, and it is possible that impoverished early language development might lower IQ longer-term if it persisted, directly or via the mediating effect of language in other skills. The early studies found poor language development characterising young institutionalised children as well as older ex-institutional children like those studied by Goldfarb, and there is no indication that language skills improved within the institution. In the present study

language delay was found in the institutionalised group at age 2 but it had been overcome by age 4 even for those children remaining in institutions at this age. Thus, if language is a prerequisite for the development of some other intellectual skills, the institutional children in the present study had a better foundation than the children in the studies of earlier institutions.

It is possible to ask the unanswerable question of whether IQs would have been higher still had the children lived in their families from the beginning. That is, despite environmental stimulation and social and language interaction sufficient to allow at least average development, the lack of a close long-term attachment might still have resulted in a relative IQ disadvantage for children in this study. Such an effect has been shown for older institutional children (Saltz, 1973), but it would be impossible to know whether or not it occurred in the children in the present study or, if so, persisted to any degree after the children had formed family attachments.

Although no IQ deficit was evident, it is worth noting that the attainments of the ex-institutional adolescents were lower, at least by age 16, than those of their matched comparisons. This should probably not be attributed to institutional experience alone, as other studies show similar underattainment in adopted and "restored" children where institutional care had been much shorter or non-existent. Bohman and Sigvardssons (1985) prospective longitudinal study included adopted children and those reared by mothers who had originally wished them to be adopted, who could be compared to the "restored" group. Almost all the adopted children and about a third of the counterparts of the "restored" children had spent some time during infancy in an institution before placement, but the mean time was much shorter than in the present study - 6 months for adoptees, slightly longer for the equivalent of the "restored" group (Bohman 1971). Adopted children at 15 and at 18 (when data was available only on the

boys) showed attainments and (at 18) mental abilities very similar to their age-mates in the general population. However their scores were not above average as would be expected on the basis of the higher occupational status of most of the adoptive parents. Bohman and Sigvardsson suggested that "stresses intrinsic to the adoption situation" might have a negative impact upon achievement, and also that genetic factors might play a part if the low SES of the biological parents were taken to reflect an inherited, genetically determined intellectual capacity. The counterparts of the "restored" children showed underachievement at age 15 and 18 compared to age-mates and particularly compared to adoptees. This pattern is similar to the achievements of the "restored" group in the present study.

A similar pattern was also found by the National Child Development Study where adopted children and illegitimate children brought up by biological parents parallel the ex-institutional adopted and "restored" groups, but generally without the period of institutionalisation. Adoptees, although achieving well at age 11 in comparison to the cohort in the general population, underachieved in relation to children in advantaged homes similar to their own; while illegitimate children brought up by a parent achieved worse than their age-mates in the general population (Lambert and Streather, 1980). At age 23, adoptees again showed the highest achievement, over 80% having gained some formal qualifications by age 23 compared to 75% of the total group of legitimate children brought up in their families (i.e. not taking account of the relatively advantaged home background of the adoptees). Again, the illegitimate group were worst off; over half the women, and just under 30% of the men, had no formal educational or vocational qualifications at all by age 23 (Maughan and Pickles, 1990). Thus the underattainment of the ex-institutional groups in the present study cannot be attributed only to the period of institutional care.

8.3: Effects of different types of family placement on IQ.

Although in both the studies just mentioned adopted children did less well than expected on the basis of their generally advantaged family background, they did well in comparison to age-mates in general, and particularly well in contrast to the "restored" group equivalents. In the present study also, what stands out at age 16 as at age 8 is the finding that different placements early in childhood are associated with different IQ scores. In no other group were the large gains apparent which occurred in children placed in adoptive homes between the ages of two and four-and-a-half years. What is more, these gains were maintained over the subsequent 12 years. Restoration to biological parents at the same age did not have the same effect.

There was no evidence to suggest that selective placement could account for the differences in IQ between adopted and restored children. Though children were not randomly placed in families, the main issues involved in whether a child was adopted before the age of four and a half were the indecisiveness of the biological mother and the child's skin colour. In only one case was the child's slow development a factor. (Tizard, 1977).

In considering other possible explanations for these findings the social class difference between adoptive and "restored" families is important. Other differences between the families also appear likely agents of higher IQ in the adoptees. Adoptive parents spent more time playing with their children, and reading to them, joined in their imaginative games more frequently, and were able to give them a wider range of experiences and of play material, than "restored" parents with their children (Tizard, 1977). This may have led to increased IQ scores either directly, or indirectly via greater attachment or fewer behaviour problems, both of which were related at age 8 to a higher IQ within each group. Both were

more likely to be found in adopted children than in restored, and may play some role in the inter-group difference.

However, social class and these other differences do not account for the adoptees apparent IQ gain if adopted before four and a half but not if adopted later, and this must now be considered.

8.4 The question of an age-based sensitive period for IQ gains.

Dennis (1973) found that children adopted before the age of two from a grossly depriving institution achieved a normal level of intellectual development, while those adopted after age two did not overcome their initial retardation, though they developed at a normal rate after adoption. (Clarke and Clarke (1976) dispute that this finding, which contrasts with those placed earlier, reflects a genuine age effect.) In the present study, where gross deprivation and retardation were absent, adoption after age 2 was followed by considerable IQ gains. However, placement after age four and a half did not appear to lead to IQ score increases as often or as frequently as did earlier placement.

Before taking this as indicating an age effect, it is first necessary to consider the possibility of selective placement within adoption, that is, whether less "bright" children were placed for adoption later than others. Thirty children had been tested using the Cattell in the institutions when they were two years old, and while it must be acknowledged that tests at such an early age correlate poorly with later IQ, these data provide the only means of testing the hypothesis of selective placement. The IQ equivalents of the Cattell mental ages of those children subsequently placed for adoption before age four and a half ranged between 80 and 107, with a mean of 93. However, only two of the children adopted after age

four-and-a-half had been tested in the institutions when they were 2; one of these was the child whose slow development was causing concern, who indeed scored lowest of all the children tested at 2 (equivalent to an IQ score of 77), and scored 87 when retested on the WPPSI aged four and a half. The other child scored an IQ equivalent of 83 at age 2, and 114 on the WPPSI at four and a half. Without more data, it is impossible to know whether the children adopted later were a lower-scoring group than those adopted earlier. As outlined above, apart from the one slow-developing child, it was the child's skin colour and the indecision of the biological mother which appeared to determine whether a child was placed earlier or later.

If the greater IQ increase following earlier adoption is meaningful and not explicable by selective placement or small numbers, it offers some support to the idea of an age-based sensitive period, and differs from the assessment made by Clarke and Clarke (1986) that up until adolescence at least there is no evidence that "increasing age exercises any obvious constraints upon responsiveness" (p.742) to environmental change. The discrepancy between the 2-year limit found by Dennis and the four-and-a-half year limit here may reflect the contrast between an intensely depriving setting resulting in grossly low scores, and a relatively stimulating one which although it may depress optimum potential scores (as suggested by the IQ rises of the earlier-adopted group) does so by rather little. Within the total group of 9 children adopted after four and a half, age at adoption is unrelated to IQ change, but it may still be a candidate to explain the overall difference between children adopted before and after that age; other variables like SES of adoptive parents or disruptions in pre-placement history showed no direct relationship to IQ changes.

This raises the question of the mechanism involved if there is an age-based change in sensitivity. Why should the adoptive

family environment apparently have more marked effects on IQ before the age of four and a half? Is there a change in what the environment offers to the older child, in other words age specificity rather than a true sensitive period (MacDonald 1986)? Is there a change in what the child has become able to elicit from the environment, a change within the child; suggesting an age-based period of particular susceptibility to environmental influences, determined to a greater or lesser extent by the child's transactions with the environment?

To begin with what the environment offers to a particular agegroup, it may be important that the child who is older at placement spends less time than a preschool child in interaction with parents, with its possibilities for intensive and highly individualised stimulation. A number of authors including Clarke and Clarke, have pointed to the importance of the intensity of appropriate stimulation in reversing the effects of early experience. Such children have also spent longer in institutions which although good of their kind, may lack the depth and range of learning experiences which can progressively become available to a child growing up in a family setting. Pilling and Pringle (1978), reviewing research on early environmental experiences and development, conclude that "Although the infant spends much time exploring the physical environment on his own, at least from the second year, the intellectual benefits he derives from this exploration appear to be much enhanced by the extent to which his mother or other adults he knows well are on hand to encourage, suggest, help and explain...An insufficiency of stimulation and responsiveness to the child's individual characteristics and developmental level do not necessarily have effects on later development that are irreversible but they make the attainment of optimal development much more difficult" (p.112). This may be the case in the children exposed for longer to the institutional environment.

There is likely to be no rigid distinction between sensitive periods which result from changes in developmental level, and those due to internal maturational change, but rather a continuum from greater to lesser environmental control (MacDonald 1986). Changes within the child will interrelate with what the child has become able to elicit from the environment. Given that children actively select and shape their own learning experiences, certain kinds of earlier experience in the family may also have a continuing influence, making it possible for the child to approach people and the environment as sources of learning and discovery in a different way from an institutionalised child, with a cumulative cognitive effect.

A consideration of attachment theory offers some support for this suggestion. When the children in the present study were first assessed within the institutions at the age of 24 months, they were strikingly insecure in their relationships with the nurses, running to be picked up when staff entered the room and crying when they left it. Descriptive data were collected on the institutional children's behaviour, and so were standardised observations of the children with the caregiver and with the interviewer, a stranger. The latter approximated in some respects the "Strange Situation" procedure (Ainsworth et al., 1978) now used to categorise young children's attachment behaviour. From this material it seems justifiable to conclude at least that the children in the present study would not have been categorised as "securely attached", without speculating as to which of the current categories of insecure attachment they would fall into. Indeed, it might not be surprising if an upbringing so atypical of home-reared infants resulted in a pattern of responses unlike any of the patterns shown by home-reared children.

The relevance of this rough classification of the institutional children as "insecurely attached" lies in

research indicating that (among children reared at home) secure versus insecure attachment relationships with parents within the first 18 months predict aspects of later functioning in ways which seem relevant for cognitive development. For example, at 3 years, independent teachers' ratings of qualities such as curiosity and active engagement in the surroundings, inter alia, were associated with earlier secure rather than insecure attachment; so at age 5 were such qualities as curiosity and exploration (Matas, Arend and Sroufe, 1978; Sroufe 1979). Children whose attachment had earlier been classified as "secure" tended to be self-reliant and willing to try things for themselves, and were effective in getting adult help when needed. In contrast, previously insecurely attached children tended to be overdependent, passively waiting for an adult rather than attempting a task; despite this dependence, they were less direct and confident than securely attached children in enlisting adult help. (Sroufe, Fox, and Pancake, 1983). All this does suggest that institutional experience which gives no opportunity for secure attachment relationships may adversely affect the child's subsequent ability to approach adults and the environment as sources of learning and discovery, and thus possibly affect IQ and attainment.

The general lack of specific attachments of children while in institutions may also be of significance in that attachment to the mother and IQ were correlated at age 8 in the children who had been placed in families by that age. Also, the performance of the children who spent longer in institutional care could be expected to be adversely affected by such factors as lowered self-esteem, and confusion and anxiety about their identity, their family of origin, and the reasons why they were in care, as described for other children in residential care by Holmes (1983).

8.5: Longterm effects of institutional care on behavioural and emotional problems, and the effects of different family placements.

The relationships and attachments of the ex-institutional group will be discussed subsequently, but other aspects of their adjustment in adolescence must be considered.

When the children were eight, the teachers reported more difficulties in their behaviour than the parents did; and at 16, problems still seemed generally more noticeable at school. Data from the parents and the adolescents themselves did not suggest longterm effects of institutionalisation other than in the area of social relationships - a very different finding from the early studies by Goldfarb in particular. However, data from the adolescents' schools gave a different picture. Although there had been a slight reduction in frequency of problems, the ex-institutional adolescents still tended to show the same problems reported by teachers at eight; they were restless, distractable, and quarrelsome with peers, and also irritable, and resentful if corrected by adults. These types of difficulty closely resembled those described by Goldfarb (1943a,b) in ex-institutional 6-10 and 10-14 year-olds, and the aggressive, antisocial and distractible behaviour described by Bowlby in his 1951 report as part of the "affectionless and psychopathic character". As these characteristics were shown to some degree by between 35% and 50% of the ex-institutional group in this study it appears that early institutional care was still producing an appreciable impact, by whatever mechanism this was brought about. Similarly, Lambert (1981) examined those children in the National Child Development study adopted from care by age 7, and found that at ages 7, 11, and 16, teachers gave high problem scores to 30% of these children - more than double the 12% in the NCD study cohort as a whole.

While noting that the adopted adolescents as well as the restored group show a significantly higher mean score for school difficulties than their matched comparisons, it must also be emphasised that the ex-institutional group was not homogeneous. Differences between the adopted and the restored groups were consistently in favour of the former, reflecting differences in the family environments. The restored group showed a high rate of antisocial behaviour, with significantly more difficulties at school and (on one measure) at home than the adoptees; twice the proportion of restored than adopted individuals were definable as maladjusted from the school "B" scale data, and significantly more had been referred for psychological or psychiatric help. Further, improvements were shown by most of the adoptees, but none of the restored group, who had shown considerable problems at school when they were 8. All of this illustrates the power of the post-institutional environment.

How far is it possible to differentiate the effects of institutionalisation from those of illegitimate or adopted status alone? In the total NCD cohort at 16, mean scores are not reported, but the pattern of "B" scale problems resembled that in the present study; the group of legitimate children who had remained in their families, (paralleling the comparison group) had the lowest problem score on the B scale, the illegitimate group (paralleling the restored) had significantly worse scores, and the adoptees were intermediate between them, but did not differ significantly from either. In this analysis, differences in SES, housing and family size were taken into account (Maugham and Pickles, 1990), so the comparison between adoptees and legitimate children approximates to the comparison in the present study between adoptees and their matched comparisons. It seems likely, then, that the level of disturbance of the ex-institutional adoptees in the present study, who did score significantly worse than their matched comparisons, was higher

than that of the NCD adopted group, who did not differ significantly from the legitimate group.

This suggests a higher overall level of school problems in the ex-institutional adoptees, which may be attributable to the institutional experience. The kinds of difficulty shown by the ex-institutional children at school also compare interestingly with the NCD data. The high problem scores of the NCD illegitimate group represented a broad spectrum of behaviour difficulties, like those of the restored children; they had worse scores than the legitimate group on restlessness/distractibility, antisocial/conduct disorder, and peer relations items, but, again like the restored group, did not show higher scores on anxiety. However, NCD adoptees showed a narrower range of difficulties. They did not differ from the legitimate group either on restlessness and distractibility, or on antisocial/conduct disorder items. But they had the highest scores on items reflecting unhappy, anxious behaviour, and also had significantly greater problems with peers. The ex-institutional adoptees showed these difficulties, but also showed restless and distractible behaviour, and aggression, to a significant degree. In this respect they resemble the ex-institutional restored group more than they resemble the NCD adoptees, and this behaviour may represent the effect of institutional care rather than of adoptive status.

A similar conclusion concerning aggressive behaviour as possibly linked to ex-institutional status is suggested by comparison of the ex-institutional adoptees with the (younger) non-institutional adoptees of the Delaware Family Study (Hoopes, 1982), which found that teachers rated adopted children in middle childhood as showing more problems than comparisons on the Bristol Social Adjustment Guides. (Three-quarters of this group were girls, in contrast to the predominance of boys in the ex-institutional groups in the present study.) Hostility and anxiety towards adults, and

restless nervous habits were significantly more common among adoptees, similarly to the ex-institutional adoptees in the present study, but there was no indication that the Delaware adoptees shared the irritability and fighting reported in the ex-institutional group.

The finding in the present study that the ex-institutional group did poorly in relation to their matched comparisons, but not significantly worse than school comparisons, requires some further consideration. The first point to be made is that the "B" scale means of the school comparisons were themselves noticeably higher, and their standard deviations larger, than those of any of the other four comparison groups (see table 6.7). It is possible that this reflects genuine variables to do with the school, teacher or area which the ex-institutional group have in common with their school comparisons but not with other groups. However it may also reflect some unexplained artifact, or simply be explained by the small numbers involved; if either of the latter, the difference between ex-institutional groups and their school comparisons may be underestimated. A second explanation concerns not the high problem scores of the school comparisons, but the low scores of the matched comparison group. These may reflect some possible self-selection on the part of the matched comparison group (see chapter 4), which would artificially inflate the discrepancies between them and the ex-institutional children. However, it may be that the differences are real and that as in the NCD study (Lambert and Streater, 1980) the ex-institutional children's difficulties are seen most clearly when compared with children matched for social class, family type, etc. rather than with the unmatched, but randomly selected, school comparisons.

In controlling statistically for background factors, the NCD study's analysis of rates of disturbance in the different groups provides a parallel to the matched comparison groups in the present study, but no equivalent to the unmatched

classmate comparison group. Such a group is provided, however, in the study by Bohman and Sigvardsson (1985). They reported that the teachers of 15-year-old adoptees rated their adjustment very similar to that of classmate comparisons; comparably, in the present study, ex-institutional adoptees did not score significantly worse than their classmate comparisons. However, Bohman and Sigvardsson found that 15-year-olds living with biological parents who had originally wanted them adopted (counterparts of the restored adolescents,) were rated maladjusted significantly more often than classmate comparisons - over twice as often. If these teacher's ratings of maladjustment are taken as equivalents of "B" scale scores above the cut-off point for psychiatric screening, the findings of the present study show a similar pattern to Bohman's findings, with the restored group, but not the adoptees, showing a significantly higher rate of disturbance than their classmate comparisons. Bohman's finding that adoptees school difficulties improved between ages 11 and 15, while those of children brought up by a parent who had initially asked for adoption did not, parallels the contrast between adoptees and restored adolescents found in the present study as well as the findings of the NCD study.

These comparisons underline that, as was the case for attainments, the difficulties of the ex-institutional groups cannot be attributed solely to their earlier institutional experience. Other risk factors seem to be involved both in illegitimate status, or initially "unwanted" status, and in adoption. However, there are indications that early institutional experience may somewhat increase the overall level of disturbance in school, and may also contribute to particular kinds of difficulty, in particular aggressive and antisocial behaviour - recalling the early descriptions by Bowlby and Goldfarb.

8.6: Long-term effects of early institutional care upon family relationships and attachments.

The earlier work of Bowlby (1946) and Goldfarb, supported by some subsequent studies (e.g. Trasler, 1957), suggested that one result of early maternal deprivation could be an inability to make lasting relationships; in the children studied by Trasler, prolonged early institutional care was the factor most strongly linked to foster breakdown. The evidence from the present study indicates that children who have experienced prolonged institutionalisation with no stable attachment figures can nonetheless make lasting relationships within their families, but that this depends on what the family offers the child, as discussed below.

8.7: Influence of different types of family placement on family relationships and attachments.

The family relationships of most of the adopted 16-year olds seemed satisfactory for them and for their parents, and differed little from non-adopted comparisons who had never been in care. In contrast, the restored group still suffered difficulties and poor family relationships much more frequently than either the adoptees or their own comparison group. They and their parents were less often attached to each other than adoptees or comparisons, and where there were siblings their mothers tended to prefer them to the restored child. Restored 16-year-olds still showed less affection to their parents than did any other group, as had been the case when they were 8-year-olds, and their parents, equally, found difficulty in showing affection to them. There were also indications that they wanted less involvement in family discussions than other groups, and identified themselves less with their parents. Though both ex-institutional groups tended to have more difficulty with siblings than their comparisons, the restored group had particularly great difficulty, probably because most of the restored children had

entered their families to find younger siblings already there; the difficulties to which this situation had given rise had not been overcome by mid-adolescence.

Early institutional care with a lack of close attachments had not necessarily led to a later inability to make a close attachment to parents and to become as much part of a family as any other child. However, this was achieved much more successfully by the adoptees than the restored children. No explanation of this difference between the adopted and restored groups in terms of selective placement seems likely (Tizard, 1977). Rather, it seems most probably to reflect numerous differences in the family settings offered to the child by the adoptive and "restored" families.

These differences can be thought of in terms of differing intensity of parental involvement with the child. Intensity of subsequent stimulation in reversing effects of early deprivation has already been mentioned (section 8.4) in relation to cognitive development, and MacDonald's (1985) review notes its importance in relation to social development. The adoptive parents, who had very much wanted a child, put a lot of time and effort into building a relationship, and were often ready to accept dependent and somewhat regressive behaviour initially. When the children were younger adoptive parents spent more time playing with their children than "restored" parents, spent more time with them in educative pursuits, and involved them more in joint household activities. These differences were greater than a simple class difference; adoptive parents spent more time in such activities with their children than a middle-class comparison group, and "restored" parents less than a working-class comparison group. Compared to the adoptive parents, the parents of the restored children had fewer material resources and more other children, had been more ambivalent about the child living with them, spent relatively little time in shared activities with the child, and often expected their young

child to manage very independently of them. Thus in general terms, the adoptive family setting provided an intensive and enriched environment in terms of the parent's input and involvement with the child, while the "restored" families offered a somewhat impoverished environment. The fact that restored children showed later difficulties in attachment much more commonly than their adopted counterparts would be predicted on the basis of the much less intensive corrective post-institutional experience available to them.

This may also explain why at age 8 a tendency for later placement to be associated with less attachment to the mother was found in the restored group, but not in the adopted one. (Tizard and Hodges, 1978). Since much physical care and attention is indispensable for a very young child, it may be that restored children are at particular risk if they return to the family at a slightly older age, when more autonomous functioning can be required of them; an example of an age-based environmental effect rather than a "sensitive period". In other words, the hypothesis is that adopted children received the attention and care likely to lead to attachment regardless of their age; restored children were likely to receive it if they entered their families still as very young children, but not if they were slightly older and apparently able to manage more independently. The effect may have been enhanced because restored children tended to be the oldest child, with younger step-sibs requiring the parents' care, while adopted children were more likely to be singletons or younger children themselves, without such competition from younger sibs.

A related explanation of the association between age at placement and attachment in restored but not adopted children is that the length of time before the biological mother reclaimed the child from the institution reflected the degree of her ambivalence and the difficulties of fitting the child into her life, both of which affected her relationship with

and handling of the child subsequently. Further, the ambivalence may have been mutual; restored children could be expected to have more ambivalent feelings about their parents, step-parents and step-sibs to contend with than did adopted children.

8.8: Relationships to peers and to adults outside the family.

The similarity shown by the two ex-institutional groups in their relationships to peers and to adults outside the family contrasts strikingly with the great difference in their family relationships. Adopted and restored children cannot be treated as one group as regards their family relationships, but in relation to peers and other adults they resemble each other, and differ from their matched comparisons who had never been in care.

In discussing connections between earlier and later functioning, it is important to recognise the role of developmental transformations; that behaviour is not isomorphic over time (Sroufe and Rutter, 1984). Although the indiscriminate "overfriendliness" shown by some of the ex-institutional children at 8 years old no longer seemed to be a problem at 16, the ex-institutional adolescents were still more often oriented towards adult attention and approval than comparison adolescents.

They were also likelier to have difficulties in peer relations, and less likely than comparisons to have a special friend, at an age when the importance of peer relationships increases relative to family relationships. This shift to the development of close ties with friends appears to play an important part in protecting the individual against the psychological effects of stress (Monck 1991); so the ex-institutional group are likely to be more vulnerable. They were less likely to see peers as a source of emotional

support, in that even where they did have a special friend, they were less likely to turn to a peer to confide in when they were anxious. A fifth of them were seen as being friendly to any peer, rather than choosing their friends. These findings, regarding relationships with adults as well as peer relationships, recall Yarrow's (1974) data on 10-year-olds, which suggested that disruption of a caregiving relationship after 6 months of age had long-term negative effects on the capacity to establish discriminating relationships, i.e. different levels of relationships with people.

If these five characteristics are considered together, ex-institutional adolescents are very much more likely to show four or five of them than comparison adolescents. In this sense, they can be regarded as an ex-institutional syndrome which does not appear to be merely a reflection of general behavioural and emotional disturbance. However, despite being much more common in the ex-institutional group, this syndrome still occurs in only half their number; and it should also be emphasised that in general the behaviour characteristics it represents are differences from the comparison group and do not all imply difficulties.

The pattern of these differences very much resembles the picture when the children were 8 years old. This raises the question of whether this syndrome is permanent, or whether in time these adolescent's social relationships will come to resemble more closely those of people who have always lived in their families. If permanent, further questions present themselves about the extent to which they will be able to make close emotional attachments as adults to partners and spouses.

There are a number of possible explanations which may bear on these findings. These could be seen as a spectrum; at one extreme would be "main-effects" critical-period models where early experience is seen to determine later development in a linear way, and at the other extreme models of complete

elasticity where current circumstances are determinant. Less exaggeratedly, models range from those which stress the enduring impact of early institutional experience upon later personality organisation, and attribute less weight to later events, to those which place the whole burden of explanation upon post-institutional circumstances. In the latter category is the hypothesis that families who took their "own" or an adopted child after a period in institutional care might be characterised by particular patterns of child-rearing, different from families raising their "own" children from birth, and that the behaviour of the ex-institutional children is a response to this. This hypothesis seems unlikely because of the extreme differences in the attitudes and child-rearing patterns of the "restored" and adoptive parents, as opposed to the similarity of many of the ways in which both groups of children differed from their comparison groups.

However, despite these differences, both adoptive and "restored" parents were alike in that they had missed their child's early years, and it is possible that in some way this loss affected their handling of the child. Similarly, Lambert and Streather (1980) suggest that the relatively poorer social adjustment of adoptees at 11 years compared to non-adopted children may have been based on an uncertainty on the part of the adoptive parents about their own reactions and responses, which had communicated itself to the children and made relationships harder for them. If parents in the present study did experience such uncertainty, how it could have operated to produce the differences found is another question.

A similar kind of model explains the characteristic differences in peer relationships in terms of the perpetuation of earlier patterns through the responses of the environment. Clarke and Clarke (1979) suggested a transactional explanation for the findings at age 8, which should apply equally to the similar picture at 16, and which again put the emphasis on the responses of others to the child. They pointed out that while

the adoptive parents made great efforts to foster close attachments in the children placed with them, they did not put the same sort of effort into helping the children get on with peers or with teachers, so that difficulties remained in these areas. It should be further added that unlike the highly motivated parents, there was no reason for the ex-institutional children's peers to tolerate or make special efforts towards children who could not already relate reasonably well. Such difficulties would thus be likely to perpetuate themselves. This would be the more so because at the time of placement the children's behaviour towards adults was such as to try to maintain close contact with them, which was welcome to the adoptive parents if rather less so to the restored parents; while relationships with other children in the nursery had often been competitive, aggressive, and rivalrous for adult attention. Overfriendly behaviour towards adults would also be expected to perpetuate itself, since adults generally respond positively to a friendly child, even an unknown one. Given such a model of the reinforcement of existing types of behaviour, though, children who seemed to be managing peer relationships well by 8 would also be expected to have the most satisfactory peer relations at 16, and this did not seem to be the case.

In contrast to models emphasising the contribution of the later environment, a different type of hypothesis stresses the direct impact of the children's early experiences on their development, invoking the concept of a developmental delay and of developmental transformations in relationships. Anna Freud (1966) outlined a "developmental line", a sequence in which adequate development of the child's relation to parents forms a precondition for normal later relationships with peers and others outside the family. The ex-institutional children had their first opportunity to develop these close exclusive attachments around an age when most children, in their families from birth, have already done so. They may continue to lag somewhat behind in the broadening of their social

horizons beyond the family and the increase in the emotional importance of peers relative to parents. There is some support for this in the finding that children who were parent-oriented and not particularly peer-oriented at 8 - strongly attached to their parents, but described as preferring to be solitary and uninvolved with other children rather than as having a group of special friends - who apparently had the best peer relationships by 16.

Not all forms of transactional hypothesis put such stress as Clarke and Clarke upon the subsequent environment's 'input' to the child; others emphasise more the longlasting impact of the early experience on development, though not in terms of a delay. In effect, their emphasis is less on what the environment offers and more on what the child has become able to elicit from it as a result of the earlier experiences. The explanatory model of attachment theorists, for example, is one which stresses the child's expectations and experience of the environment, as well as the way in which others tend to respond to a child behaving in a particular way. Sroufe and his co-workers stress the ways in which the experience of the insecure infant or child differs from that of the more confident child who can engage more freely with the environment, adults and peers. "Once constitution and early experience have interacted to produce the emergent personality, the child is an active force in his or her own development" (Sroufe, 1979). Mental expectations and representations, which guide behaviour and the perception of experience, both persist across time and influence the individuals experience of and interaction with his later environment. They are also influenced to a greater or lesser extent by new circumstances; that is, early experience may give a particular initial direction to the course of development, but the entire trajectory is not set.

Work in attachment theory offers interesting comparisons with the findings regarding peers in the present study, as it

suggests that social relationships with peers are an aspect of development particularly vulnerable to difficulties in early attachment. Sroufe and his co-workers (Sroufe, 1988; LaFreniere and Sroufe, 1985; Waters, Wippman and Sroufe, 1979) found that children who as infants had been seen as having secure attachments to the mother - assessed via Ainsworth's (1978) Strange Situation procedure - managed peer relationships better at three-and-a-half and five years old than children who had not been securely attached, as well as coping better in other respects. Sociometry showed them to be more popular. They were less likely to be victimisers or victims than non-securely attached children, and their relationships with peers were deeper and less likely to be tinged with hostility. There are clear parallels in these younger children, with the unpopularity and aggressive behaviour found in the ex-institutional group at the ages of 8 and 16. Further, a follow up of 28 eight-year-old children, based on three days classroom observation, found significant differences in peer competence between children with secure and non-secure attachment histories, in favour of the former (Sroufe, 1988).

Sroufe and Rutter (1984) point out that an adaptation which may be serviceable at one point in development may later compromise the child's ability to draw to the full upon the environment in the service of more flexible adaptation. They give an example which seems relevant for the social relationships of the children in this study: "Thus, a given pattern of early adaptation could lead a child to isolate himself from peers or to alienate them, to avoid emotionally complex and stimulating social commerce, or to respond to such complexity in an impulsive or inflexible manner. Even such patterns may not be viewed as pathological (in the clinical sense) and certainly may be viewed as "adapted" in the sense that the child continues to strive toward a "fit" with the environment. But if the adaptation compromises the normal developmental process whereby children are increasingly able

to draw emotional support from age-mates (as well as give it) and to stay engaged in social commerce despite the frequent emotional challenge of doing so, the individual may be sacrificing an important buffer against stress and, ultimately, psychopathology...." (p.23).

Similarly to the findings regarding peers, parallels exist between the relationships of the ex-institutional children to adults other than parents, and the finding from attachment research that early insecure attachment was associated with over-dependent relationships to adults in preschool. Sroufe, Fox and Pancake (1983) found that children whose attachment had been classified as avoidant or resistant were over-dependent in preschool at 4-5 years old, in the sense that their need for contact, approval and attention from adults interfered with other developmental tasks such as peer relationships and mastery of their environment. Again, this parallels the greater adult-centredness of the ex-institutional group. Sroufe hypothesised that with time, anxious-avoidant children would cease to reveal their dependency as clearly as at this early age, but that it might "go underground", showing up later in a fear of interpersonal closeness. This speculation aligns interestingly with the finding that the ex-institutional adolescents are less likely to have a special friend or to confide in peers.

The hypothesis that early institutional care led to insecure attachment depends in part on the observed behaviour of the institutional group at age 2, but also on the assumption that the characteristics of institutional care, with its rapidly changing caregivers and lack of close reciprocal adult-child relationships, were not such as to promote secure attachment. Ultimately this rests on the assumption made by attachment theory that certain characteristics of maternal care, subsumed under the construct of maternal sensitivity, influence the development of secure attachments. Other authors have offered alternative interpretations of the link between

behaviour in the Strange Situation and elsewhere, including the effect on both of underlying temperamental variables, or of cultural influences on socialisation (Chess and Thomas, 1982; Kagan, 1984). Belsky and Isabella's recent review (1988) indicates that while some studies found associations between some neonatal behavioural ratings and aspects of later attachment, most studies found little if any covariation between reported infant temperament and attachment, and they conclude that "there is enough consistency, even in the absence of uniformity, to treat the sensitivity-security linkage as, at the very least, a viable working hypothesis" (p.45).

A number of workers whose positions are otherwise diverse appear to converge on the view that early experience has effects upon later behaviour through its influence upon the mental expectations and representations which guide behaviour and shape how experience is perceived. Psychoanalytically oriented workers have always focused upon this area, perhaps particularly since the development of the object relations school; (see Tyson and Tyson (1990, ch.5, 7) for an overview of the contributions of Freud and other major figures.) Besides Bowlby, other psychoanalytically influenced developmental researchers, such as Spitz and more recently Mahler and McDevitt (1980), Stern (1985) and Emde (1984), have all in different ways given a central and organising role to the development of a sense of self in the context of early relationships. Attachment theory, itself a development of object relations theory, soon came to include investigation of mental representations, Bowlby's "internal working models" of the self, others, and self-other relationships, alongside the original behaviourally based criteria of attachment (Main, Kaplan and Cassidy, 1985). The recent emphasis in attachment research on defensive processes (Cassidy and Kobak, 1988) echoing Ainsworth's (1962) summary of the psychoanalytic position towards the reversibility of effects of maternal deprivation, underlines why effects may be long-lasting. In

this view, early maternal deprivation could be viewed as leading to the establishment of defensive operations, serving to insulate the child against the painful frustration of seeking an interaction with an environment that is unstimulating and unsupportive. Long-term effects are likely because, once entrenched, this defensive operation would tend to maintain itself, insulating the child against interaction with an environment that could prove responsive and helpful if he could only be receptive to it.

However, non-psychoanalytic workers also point to the importance of this area, and clearly Ainsworth's view, articulated above, could be restated for example in terms of cognitive rather than defensive processes. Even though Kagan argued that the whole idea of connectedness between early and later development had more to do with the Western belief system than with reality, (Kagan, Kearsley and Zelazo, 1978), he suggested that stabilities in behaviour might be produced via the translation of experience into the child's belief system, and that "it is only when the child interprets experiences as having implications for his talent, gender, virtue and acceptability that his dispositions become more resistant to change" (1984, p.111). This last could be restated by saying that it is via the representation of the self ("talent, gender, virtue and acceptability") and of others and their expected relationships with the individual ("acceptability"), that continuities may emerge. Rutter (1985) pointed to the effects of children's earlier experience upon habits, attitudes, self-concepts and self-esteem as possible mediators of later behaviour. In his study of girls brought up in institutions, very different outcomes were likely depending on whether the girl had had a positive school experience, allowing the development of a sense that they could control and plan for their lives. Those who had had a positive school experience were three times more likely than others to plan for a career and plan their marriage; which was twelve times more likely to result in marriage for positive

reasons, which was five times more likely to lead to a supportive marital relationship, which was three times more likely to lead to good social functioning and parenting. Clearly in such a case, the girls' development of a sense of "planful competence" played a critical role in shifting from a risk pathway to a more adaptive one. As Rutter points out, what is evident is not unchanging behaviour over time, but rather "a style of dealing with life circumstances" which increased the chances of a poorer outcome. Again, this could be restated in terms of mental representations of the self, of others, and of expectable relationships between the two.

Not all these approaches take the view that one particular early period of life, or the same period, is of importance; and as Rutter's example shows, later experience, in this case in the secondary school years can clearly have snowballing effects. Kagan (1984) places the emergence of the first components of a sense of self late in the second year of life, while the second half of the first year was thought by Bowlby to be the beginning of the period crucial for the development of attachments, involving the gradual building up of internal working models of the self, others and relationships.

Clarke and Clarke (1986) take a different view, restating their position that "adverse circumstances are of equal importance whether experienced early or later in childhood" and their "wedge" model of development, "reflecting at the thick end the sensitivity to environment which appears to be a function of the human" and tailing off to "the thin end which may well be very much later in life, even in old age". In their view there is no indication up till adolescence that increasing age exercises any obvious constraints upon responsiveness. Although they point to transactional mechanisms by which early experiences may be perpetuated, they see these as disconfirming rather than confirming that early importance may have particular effects. Effects of early experience appear to be defined as such only if they persist

in the absence of any interacting or resulting environmental circumstances; while for most other investigators, including Rutter and Sroufe, the latter themselves are viewed as some of the mediating mechanisms by which early experience may affect later development.

8.9: Limitations of the study.

Ideally, this study would have been done rather differently. First, the numbers would have been larger. The longitudinal nature of the overall study meant both that the ex-institutional groups could not be added to later in the study, and that numbers would inevitably reduce across the years. The small size of the sample means that one has to be extremely cautious in generalising from the findings of the present study. It also limits the kinds of statistical analyses which are possible. Secondly, it would ideally have been preferable if the interviewers had been able to carry out interviews with both ex-institutional and comparison groups; again constrained by small numbers, the design of the study confounded interviewer with the group interviewed, in the interests of minimising attrition. Thirdly, in view of the continuing difficulties of the ex-institutional group in the school setting and with peers, sociometric measures might have helped clarify the reasons for the ex-institutional group's relative unpopularity, and established whether indeed they were unpopular according to their peers, or only according to adults. However, as this would impose a much greater burden on the teachers of these children, it seems impracticable; not all teachers returned even the questionnaires, though reminded several times. Fourthly, it would have been useful to add a self-esteem measure to be completed by the adolescents. Apart from the intrinsic interest of whether ex-institutional status was associated with lower self-esteem than in comparisons, it would also have been useful to look at possible associations between self-esteem and types of difficulty in school, including the

anxiety shown by the adoptees in adolescence, and the aggressive behaviour shown by both ex-institutional groups.

8.10: Issues for further study.

Were these adolescents to be followed up again in young adulthood, there are a number of issues which would be worth pursuing. Would the IQ of adoptees placed after four and a half eventually be equivalent to that of earlier-placed adoptees? Would the behaviour difficulties in school translate into any later difficulties, for instance in work settings? When the ex-institutional group had children themselves, would their parenting of young children be affected by their own institutional upbringing, which was so unlike that of a child in an ordinary household? Friendships and networks of social support would clearly be of considerable interest; the findings of the present study suggest that this is an area of some difficulty at 16, and it could be expected to become more important with increasing independence from the parents. It may be that any remaining effects of early institutional care persist only in the form of vulnerabilities; Quinton and Rutter (1988) found that women who had been in residential care as children were more vulnerable to disorder when external circumstances were difficult, but differed little from controls when circumstances were good. It would therefore be worth attempting to look at the individuals response in the face of stress, in terms of the effort of developmental psychopathology to "understand the developmental roots of adult disorder, experiences that leave individuals vulnerable or buffered with respect to stressful life circumstances, and the capacity of individuals to draw strength from available social support" (Sroufe, 1986, p.843).

APPENDICES

Appendix 1: The critique of Skeels (1966) by Longstreth and Clarke and Clarke

This Appendix supplements section 1.2 in chapter 1, examining in more detail the critique by Longstreth and some additional criticisms raised by Clarke (1982) and Clarke and Clarke. Longstreth disputes that Skeels' study shows any IQ changes as a result of early experience; and Clarke and Clarke (1985) endorse his critique, though stating that they see the case-studies of the experimental children as evidence of the benefits of late adoption for such children, while Longstreth dismisses the entire study as scientifically worthless. Given this influential endorsement, Longstreth is worth considering further.

As described, Longstreth approaches the critique in the tradition of hereditarian criticism of the Iowa school. The study, he maintains, has been "used as a focal point in the argument that IQ is easily affected by environmental conditions of early childhood" and has been uncritically accepted by psychologists, with the exception of himself and the authors Fleishman and Bartlett who suggested in 1969 that "The simplest explanation is that these children may have inherited normal intelligence which was temporarily depressed by extreme cultural deprivation", but who did not elaborate further.

However, there are a number of difficulties with Longstreth's account of the weaknesses in the study.

1) Selection of contrast group.

He attacks first the finding of a decline in IQ in the contrast group. The contrast group consisted of 12 children some of whom had been part of the control group in a previous study (Skeels, Updegraff, Wellman and Williams, 1938), but this in itself does not make them an inappropriate contrast group. They were selectively chosen from this group in that

they included only those children who were not adopted by the age of 4, and level of intelligence was a factor in selection for adoption. This is a valid point, though the selection factor is unavoidable given a natural-experiment setting rather than one in which children could be retained in institutions for purely experimental reasons. Longstreth's argument is weakened, however, as nine of the twelve children had been considered normal in mental development at the time when adoptive placement usually occurred; this makes it difficult to argue that the group were selected for subnormal intelligence.

2) Genetic endowment of contrast and experimental groups. Longstreth also argues that the reasons why the contrast group children were not adopted at the beginning of the study period, when their IQ scores were relatively normal, was that they were "riddled with poor genetic endowment and serious disease"...while this was not the case with the "experimental" group, who were ineligible for adoption because of evident mental retardation.

This claim does not appear to be supported by the evidence. Firstly, as regards "poor genetic endowment"; this seems to be based (a) on Skeels' statement that 5 children were withheld from placement simply because of poor family histories, (b) on such details as exist about the biological parents. Skeels does not indicate how many of the "experimental" group would have been barred from adoption by a poor family history even had mental retardation not been evident. Details of the biological parents are sketchy, but Longstreth claims that on all four areas of information available - years of education of each parent, fathers occupation and mothers IQ - the experimental group parents scored higher. To take these in turn;

a) the educational level of 9 of the 13 experimental group fathers and 7 of the contrast group fathers was completely unknown, so it seems dubious from the start to claim that the experimental group scored higher. Where it was known, the

fathers of the experimental group had attended to grade 8 in 2 cases and grade 12 in one, and another had attended high school but how far was not known; the contrast group had attended to grade 8 in 3 cases, grade 6 in one and grade 12 in one. Again this gives no indication of superiority in the fathers of the experimental group.

b) Occupations are given for 6 of the experimental group fathers and 10 of the contrast group. These occupations include "WW1 Veteran" and "Navy for short time" (both experimental group) and "Unemployed at time" (contrast group), which might seem to pose some problems in rating; however Longstreth got the occupations rated blindly by two independent raters, $r=.77$, $p<0.02$, and stated that "occupations of experimental fathers were far superior to those of contrast fathers, there being one common labourer in the experimental group" (this assumes that none of the 6 unknown fathers, the WW1 veteran or the onetime Navy man had worked as common labourers) and seven in the contrast group" (where one child of uncertain paternity had a father who was either a "filling station assistant or common labourer", and another's three possible fathers were listed as "all farm labourers or equivalent"). It seems preferable to concur with Clarke's view that "..the very incomplete histories of the biological families of the two groups showed relatively little difference..." (Clarke, 1982,p.63).

c) As regards the mother's years of education, and occupation, Longstreth offers no justification of his claim that experimental group mothers performed better than control group mothers, and none appears from Skeels' data.

d)As regards the mothers IQ, it is worth noting that Clarke (1982) describes serious problems with the 1916 Stanford-Binet's underestimation of adolescent and adult IQs, and she concludes that in Skeels' and his colleagues early adoption study, where biological mothers were supposed to be of low intelligence, they were actually in the average range. Presumably this has implications for the levels reported by

Skeels (1966) but not for any difference between the groups. However, there is little evidence that they differed. The information is again very incomplete; Stanford-Binet intelligence tests were available only for five out of thirteen experimental mothers; four scored between 56 and 69 but one scored 106, giving a mean score of 70.4. (The text (p.16) refers to an IQ of 100, not 106, which would produce a mean of 69.2.) Among the six for whom no IQ was given, one was described as feeble-minded or mentally slow, and two as having psychosis with mental retardation or deficiency. In the contrast group, scores available for 8 of the 12 mothers give a mean of 64.8 (range 36-85) according to Table 16; according to the text (p.16) 9 rather than 8 mothers were tested, with a mean of 63. Of those for whom no IQ is given, one is described as dull normal; the other is the "telephone operator and general office worker" with the highest occupational level in this group according to Skeels's data. There seem to be no grounds here for concluding that the group of experimental mothers was of higher IQ than the contrast group mothers.

There is thus no support for Longstreth's contention that the experimental group (who were the ones to show subsequent gains) were of better heredity than the contrast group.

3) Physical health.

He also argues that the contrast group were "riddled with...serious disease" as well as bad heredity, which prevented their adoption, basing this on Skeels' statement that 2 were withheld from adoption because of luetic conditions, 2 because of other health problems, and one because of possible mental retardation. Closer examination of Skeel's data shows that two of the contrast group had congenital syphilis (cases 14 and 19) and so did one of the experimental group (case 9). All three were believed to have been successfully treated in the first year of life, but in case 14 symptoms reappeared subsequently. As regards other health problems, Longstreth states that they were not further described, "but that they were not transitory is indicated by

the fact that they apparently prevented adoption for a period of months or perhaps until these children's IQ scores were too low to allow adoption". In fact, the information can be extracted from Skeels's careful descriptions; in case 18, (described as a case example on p.63-64; the case number can be deduced from the IQ scores using Table 2) it is noted "Early placement recommended. Cancelled by transient illness". In the other contrast group case (no.19) it is noted that persistent mastoiditis at age 13 months prevented adoptive placement. Ironically for Longstreth's argument, it was this child's hearing loss, leading to his later placement in a special school, which made him the one "success story" among the contrast group.

On the question of health problems, Clarke (1982) also suggests that among the contrast children there appeared to be more with possible neural damage than among the experimental children. Skeels and Dye (1939) present a tabulation of birth histories indicating no difference. Tabulating all items from the medical histories which might indicate such damage, or any reason for delayed development, produces the following (more than one condition may apply to one child):

	Experimental	Control
Prematurity (requiring incubator)	2	0
All prematurity, including the above	3	1
Caesarean section	1	0
Breech delivery	1	1
Congenital syphilis	1	2
Birth injury	0	1
Early malnutrition	1	0
Number of children with any one of the above	5	5

This does not suggest that the contrast group was at greater risk than the experimental group.

Longstreth up to this point has attempted to show that the control group (despite their higher DQ scores initially) were actually of inferior intellectual and physical stock. Presumably the argument would go on that therefore the decline in their scores, and the rise in the experimental group's scores, reflected only their different endowments. However, he seems to abandon this line of argument at this point.

4) Unreliability of the initial intelligence scores.

He next argues that the initial scores of the 2 groups of children must be wrong. His reasoning is that in those cases where the mother's IQ was known, there is a greater discrepancy between the mean initial IQ of the contrast children and the mean IQ of their mothers, than between the corresponding figures for the experimental children and their mothers. These means are based on eight contrast mothers and eight rather than twelve children, and five experimental mothers and five rather than thirteen children; and are as follows; Contrast mothers, 64.8; contrast children, 88.1; experimental mothers, 70.4 (or 69.2 - see 2d above); experimental children, 72.0.) He takes this discrepancy to mean that one or other set of scores must be wrong. This is an odd assumption, since the experimental group, unlike the contrast group, is explicitly selected for low scores, and so a discrepancy would be expected; unless, as Longstreth apparently assumes, heredity so tightly constrains scores that children's should covary with their mothers' even in such very small groups. However, assuming that one or other set of scores must be wrong, Longstreth asserts that "the obvious culprit" is the children's IQs. He points out that IQs at an early age are unpredictable of later scores. This is correct, although a lack of correlation between early IQs and later IQs sits somewhat uneasily with his apparent assumption that the children's IQs should correlate closely not even with their own adult IQs but those of their mothers. He calculates significant correlations between the last two sets

of the children's scores, but non-significant ones between the first and second scores, to prove the lack of predictive validity of the early scores. So, he argues, the overall drop in scores shown by the contrast group subjects is meaningless. Therefore it would not be expected to bear any relation to length of institutionalisation. However, he cannot resist pointing out (leaving aside its meaninglessness for a moment) that there is a non-significant negative relationship between the two.

5) Relationship between gain and length of treatment. Longstreth argues that for the same reason the gain scores of the treatment group are meaningless, but he nonetheless goes on to look at correlations between these gain scores and the length of treatment. He points out correctly, though, that the finding of a non-significant correlation between the two means little, because children who gained were adopted and so gain and length of treatment were somewhat negatively related. In an apparent attempt to avoid this difficulty, he examines the relationship between the duration of treatment and gain from the first to, not the final, but the second testing, which was independent of adoption age; and finds a non-significant correlation of $-.30$. This procedure might make some sense if the assumption could be made that each individual's rate of gain was constant throughout the duration of treatment; because then the first-test to second-test gain would act as an index of overall gain which was independent of how long the child spent in the programme before being adopted. However there is no reason to make this assumption; indeed, Skeels and Dye show explicitly that gains were most rapid in the earlier months of the treatment. So the finding seems to show only that how long children stayed in treatment was unrelated to how much they had gained in the first months.

Still trying to examine the relationship between gain and treatment length, Longstreth then compares the six subjects who had less than 8 months of treatment with the six who had more, and finds that the first group gained an average of 29.8 points in an average of 6.2 months, and the second gained an

average of 22.3 points in 12.9 months, concluding that "6 months of additional treatment was associated with a relative loss of 7.5 points", which is in the opposite direction to a cumulative treatment effect. There seems to be no reason, however, why this technique avoids the pitfall he has already identified, i.e. that children who gained tended to be adopted, leading to something of a negative relationship between gain and treatment length; and neither does it take into account the finding of more rapid gains in earlier months. Longstreth does point out that this relationship was not significant and was "entirely consistent with the hypothesis that the gain scores are meaningless", but Clarke and Clarke state in their review that "...Longstreth shows that length of 'treatment' is negatively associated with IQ gain! So dramatic rises in IQ scores may have been due to uncertain initial status" (p.10).

Longstreth then comments on the "puzzle" of why Skeels ignored correlations between treatment duration and gain scores, suggesting that Skeels ignored them because they would not show the desired result. He gives a partial quote from Skeels. The remainder of the quote (underlined here) provides the answer to this "puzzle". "The (treatment) period was not constant for all children as it depended upon the individual child's rate of development. As soon as a child showed normal mental development, as measured by intelligence tests and substantiated by qualitative observations, the experimental period was considered completed and the child's visit to the school for mentally retarded was terminated" (Skeels 1966 p.18.)- that is, treatment ended. A child who gained slowly had a longer treatment than one who gained faster, until both had reached normal levels. So it would be meaningless to examine correlations between treatment duration and gain scores in the expectation that more treatment should mean more gain.

Longstreth concluded that there was no compelling evidence that the experimental group benefited from their placements, or that the institutional contrast group suffered a decline

in intelligence. If initial scores are, as he implied, random, it is difficult to explain without reference to the treatment conditions why 13 out of 13 of the experimental group should show an increase in scores, and 11 out of 12 of the contrast group should show a drop, while one rose by two points.

APPENDIX 2

THE PARENTS INTERVIEW SCHEDULE.

APPENDIX 2

PARENT INTERVIEW

16 year olds

Name _____

Address _____

Telephone _____

School _____

Head _____

Date of visit _____

NI or NHS no. _____

1. Can I just check on who else is in the family? (Living at home)

2. If I asked for a thumbnail sketch of what X is like now, what you say?

Is there anything you specially like about him?

Is there anything you particularly dislike?

It's a very in-between age isn't it - some of them seem practically grown-up and others you feel are still children underneath. What about X - does he seem more like a child or more like a grown-up?

(Prompt) What makes you say that?

3. What is X doing now?

Still at school?

Secondary 6th form?

CFE or 6th form college?

Day or boarding?

Following what course of study?

When will he leave?

What will he do after he leaves?

Left school ?

What is he doing?

Job?

How is he liking it?

Training for specific job?

General work experience, YOPS scheme, Xc -

Unemployed?

What sort of job is he seeking?

How is he finding things without a job?

2. Parents' view of child

1. More like child
2. Halfway
3. More like grown-up
8. NK

10

3. Current status

1. School or CFE for GCEs or CSEs
2. Left school and unemployed.
3. Left school and in apprenticeship/training scheme for specific job.
4. Left school and in non-specific scheme (e.g. YOPS)
5. Left school and in job.

11

4. Is there anything you particularly do together as a family, including X?
Or X together with one or other parent?
Going out for a meal? or a film? TV programme?
Or does he tend not to do things with the rest of the family? (Since when?)
What does he do when he gets in from work/school?
Does he have meals with the rest of the family?
Does he stay out of the house a lot?
Or go off to his room on his own for long periods? (Since when?)
-

5. How does he get on with his brothers and sisters? (Past year)
How much do they squabble?
What over?
Do they ever come to blows?
Is he jealous at all of the others?
(How does he show it? When did he start to be jealous?)
Are there times when they get on well together?
Do you think he will (still) be friendly with his brothers and sisters when they're all grown up and left home, or do you think they might lose touch with each other then?

(EXPLORE IN RELATION TO EACH SEPARATE SIB AND X)

6. What about his friends at school/work? (Is it a mixed school?)
Does he have any special friends?
Does he see them outside school/work?
How often?
What about friends who live nearby?
Do his friends call for him?
Do they ever phone for him?
Does he phone friends?
What about girl/boy friends?

4.
 1. Still very much involved with the family.
 2. Sometimes withdraws, appropriately.
 3. Withdraws from family to a considerable degree.
 9. Not known

12

5.(a) Sibs - current

- 0 No or only trivial difficulties.
- 1 Slight difficulties - often gets on well.
- 2 Marked difficulties - rarely gets on well.
- 3 OK with one or more sibs (rated 0 or 1) rated (2) with others.
- 8 No sib.
- 9 Not known.

13

5.(b) Sibs - in future

- 0 Will still be friendly with all sibs, or with only sib.
- 1 Will lose touch with some and not others.
- 2 Will lose touch with all sibs, or with only sib.
- 8 No sib.

14

6. Pattern of friendships

	0 None	1 Dubious	2 Definite	9 NK
(a) Special friend (1 or 2) same sex				
(b) Special friend opposite sex				
(c) Boyfriend/girlfriend				
(d) Member of "crowd"				
(e) Small groups drawn from "crowd"				

N.B. Boy/girl friend - (1) of particular importance
 (2) do things particularly with them.

6. (Continued)

How do you think he gets on with other boys and girls?

Is he a popular sort of person, or does he sometimes have difficulties?

EXPLORE

Does he tend to do things on his own, or mostly with friends?

(If solitary)

Would he really rather be with other boys and girls, or does he prefer it on his own?

Would you say he was a very shy person who finds it difficult to approach other young people?

Does he prefer people his own age, or does he prefer those who are older or younger?

Does he make friends easily?

Can he keep friends?

Does he get picked on by other children?

Does he lose friends because of being quarrelsome with other children?

Does he choose his friends or is he friendly with anyone who is friendly towards him?

6 (f) Overall rating of parents of peer relationships
 (see list of criteria). LAST YEAR

1. Very satisfactory
2. Generally satisfactory - "average"
3. Some significant problems.
4. Unsatisfactory overall: important lasting problems, some redeeming features.
5. Very unsatisfactory: almost no positives, plus serious persisting problems.
9. Not known.

20

Specific difficulties in friendships

	0 None	1 Dubious	2 Definite	9 NK	
Solitary, withdrawn					21
Prefers younger children					22
Prefers older people					23
Makes friends easily but quickly loses them					24
Quarrelsome					25
Victim - picked on by other children					26
Very shy - difficulty in approaching others.					27
Indiscriminate - friendly with anyone.					28
Unpopular for any other reason.					29

7. Do you approve of the friends he chooses?
Have you ever told him not to see any of his
friends because you didn't approve of them?
What about girl/boy friends?

Do you worry about him going to parties or staying with
friends? (parents do sometimes worry about what their
teenagers might be doing).

8. How would he usually react if someone he didn't know came
to the house - someone you knew but he hadn't met before?
Would he go off to his room or stay and be friendly?

If child seems unusually open or overfriendly

When was the last time you noticed this?

What happened?

Was he like this when he was younger?

Does it worry you?

Does it happen often?

Do you find yourself noticing it more as he gets older?

7 (a) **Parental approval of friends (same sex)**

- 0 No parental comment or approval only.
- 1 Parental disapproval but no prohibition.
- 2 Prohibition of contact with friends, but ineffective.
- 3 Prohibition by parents adhered to by child.
- 8 Not applicable.
- 9 Not known.

30

(b) **Parental approval of friends (opposite sex)**

- 0 No parental comment or approval only.
- 1 Parental disapproval but no prohibition.
- 2 Prohibition of contact with friends but ineffective.
- 3 Prohibition by parents adhered to by child.
- 8 No friend of opposite sex.
- 9 Not known

31

(c) **Parent anxious about child's activities with friends**

(anxiety re: sexual activity, drugs, delinquent activity)

<u>No, not anxious</u>	<u>Some anxiety</u>	<u>Considerable anxiety</u>	<u>NK</u>
0	1	2	9

32

8. **Strangers**

- 1 Usually shy or reserved, takes a long while to get friendly.
- 2 Shy or reserved at first, soon friendly.
- 3 Not interested, ignores them, not particularly shy.
- 4 Not shy: polite or friendly: not over-interested or over-friendly.
- 5 Over-friendly, keen to get attention.

33

I'd like to ask you now to check through a list of common health and behaviour problems to see if any of them apply to X over the last year. (A SCALE)

**(IF ANY DIFFICULTIES NOTED, ASK FOR DETAILS - UNDER WHAT CIRCUMSTANCES THE CHILD SHOWS THE BEHAVIOUR, HOW OFTEN).
(PAST YEAR).**

9. Are there any special things or situations which he finds frightening?
How does he show it when he is afraid?
Does he try to avoid (fear situation)?

	Not afraid	Needs reassurance - somewhat afraid	Marked fear (include avoidance)	No conta
	0	1	2	8
Being in the dark.				
Being alone in the house (night)				
Undressing when others present.				
Being in a crowd.				
Going to a party.				
Going on trains or buses.				
Heights.				
Thunderstorms.				
Animals				
Insects				
Going to school				
Injections				
Other (specify)				

No fears or somewhat
afraid (1) of 1 or
2 things

1 or 2 marked fears
(2) or 3 - 5 fears
altogether.

3 or more marked
fears (2) or 6 or
more altogether

NK

0

1

2

9



10. Do you feel he's reasonably sensible for his age? Or might he do silly things or dangerous things?

For instance do you feel O.K. about him going off on school trips; being on his own in the house; being in charge of younger children if you're out for the evening?

11. Do you ever feel that he'll do things rather on impulse. I mean something which suits his short-term interest, right at this moment, without him considering that it might affect other people, or inconvenience him later on?

(IF YES- example:

- just once or twice, or do you feel its characteristic of him to do this sort of things?

12. Many young people have times when they feel pretty lonely, do you think X ever feels like that?

Over (last 3 months), how many weeks have there been when you think X has been lonely? Has there been weeks when he hasn't?

IF YES - how often?

At what sort of times?

How does he spend his time when he's not at school/work?

If lonely - check if this implies problems in peer relations, q.6)

13. Has he ever seemed to think that people were against him?

(OBTAIN DETAILS)

Does he have a "chip" on his shoulder?

10. Sensible

<u>Yes, sensible</u>	<u>Dubious</u>	<u>Not sensible</u>	<u>Not known</u>
0	1	2	9

35

11. Impulsiveness

<u>No problem</u>	<u>Dubious</u>	<u>Definite problem</u>	<u>Not known</u>
0	1	2	9

36

12. Lonely

<u>Often</u>	<u>Occasionally</u>	<u>No, hardly ever</u>	<u>Not known</u>
3	2	1	9

37

13. "Chip"

<u>Often</u>	<u>Occasionally</u>	<u>No, hardly ever</u>	<u>Not known</u>
3	2	1	9

38

14. If he does something he knows is wrong, is he the sort of person who would feel anxious and guilty about it?
Or does he have a "don't care" attitude about it?

(Probe to determine existence of internal sanctions)

(If "don't care")

Do you think he really doesn't care?

Is he the sort of person who minds about doing something wrong even if he's the only person who knows about it?

How do you tell?

Does he ever tell you that he's done something wrong that you don't know about?

-
15. How does he react is he's been trying very hard to do something, and just can't get it to go the way he wants?
Does he get frustrated?
How does he show it?

(EXAMPLE?)

-
16. Now lets think about how he gets on with you.
How much of your attention does he want?
What does he do - how does he show it?
Any particular times?

GET DETAILS AND INDICATION OF FREQUENCY (CHECK IF SEEN AS A PROBLEM).

14. Conscience

Doesn't do wrong things	Shows guilt, would mind even if no-one else knew.	Wouldn't usually show guilt; wouldn't mind so long as not found out; includes lying to cover up if found out.	Not know
0	1	2	9

39

15. Tolerance of frustration

1. Doesn't persist long, loses interest, gives up.
2. Persists and eventually abandons; anger, shouting, swearing, destructive behaviour.
3. Persists and eventually abandons; anger and misery - does she/he cry? ("Nothing ever works for me").
4. Persists and eventually hets help?
5. Persists
6. Other - what?
8. Does not apply - doesn't arise?
9. Don't know

40

16. Wanting attention

No problem	Sometimes	Marked	Would like child to seek more attention.	Not know
0	1	2	3	9

41

17. What about with other people?

(Who? one or two figures of continuing importance, or less specific?)

(IF APPROPRIATE)

Does this worry you ever?

18. Is there anyone in the family that he takes after?

19. Does he find it easy to be affectionate to you?

What does he do?

Does he ever give you a cuddle or a kiss?

20. How does that compare with other children in the family?

What about (older children) when they were his age?

What about him when he was the age of (younger children)?

21. Do you sometimes feel he is over affectionate?

To you?

To other people?

17. Attention from others

<u>No problem</u>	<u>Sometimes</u>	<u>Marked</u>	<u>Not known</u>
0	1	2	9

42

18 Takes after

0	After nobody
1	Family member, biologically related.
2	Family member, not biologically related.
3	Parents remind if child not biologically theirs (adopted or fostered).
9	Not known

43

19.	Never	Rarely - not an affectionate person.	Restricted to routine times.	Some spontaneous 'out of the blue' affection.	Very affectionate - a lot of cuddles.
	0	1	2	3	4

44

20. Affectionate compared to others

0	Less than others
	Less than some, same as others
	Same as others
	More than some, same as others.
	Possibly more than others.
	Definitely more than others.
	Not known

45

21. Over affectionate

0	No
1	Possibly
2	Yes, to parents
3	Yes, to others
9	Not known

46

22. Do you find it easy to show affection to him? (Give him a kiss, give him a hug, put an arm around his shoulders?)
Is it different now he is a teenager?
In the past? baby - young child - older
At present?
How does your husband feel about showing affection to him?
-

23. Do you find him an easy child to love? I mean how you feel about him, rather than showing affection outwardly?

Do you find it easier to love any one of the children more than the others?

22. Parents showing affection to child

- 0 No difficulty
- 1 Some
- 2 Considerable
- 9 Not known

		Now		In past
MOTHER	47	<input style="width: 40px; height: 20px;" type="text"/>	48	<input style="width: 40px; height: 20px;" type="text"/>
FATHER	49	<input style="width: 40px; height: 20px;" type="text"/>	50	<input style="width: 40px; height: 20px;" type="text"/>

(IF DIFFICULTIES, CHECK FURTHER DETAILS)

23. Most loved:

N/A No sibs	No diff.	Index child (ad/rest) most loved.	Index child (biological) most loved.	Sib ad/ rest most loved	Sib (biol.child) most loved
0	1	2	3	4	5

51

24. N.B. IF STEP-PARENT

How long has (step-parent) been living with the family?

ASK THE FOLLOWING IN RELATION TO STEPFATHER
OR STEPMOTHER CURRENTLY LIVING IN FAMILY.

ASK ABOUT ORIGINAL PARENT AT END.

(a) Do you feel he's very fond of you, or do you sometimes feel he doesn't care very deeply about you?

(b) Do you feel he's fond of you in any different way, as he's got older?

- or still in the same way as when he was 8, say?

(Persistence of childhood relationship? superficiality?

More equals now?

Child looks after parent more?

Child more independent, keeps parent out of areas of life?

Parents feel less close in some ways?)

(c) Do you feel he was very fond of you, very deeply attached to you when he was 8?

(d) How about his relationship to his father?

(e) Do you feel he's very fond of him, or do you sometimes feel he doesn't care deeply about him?

(f) Do you think he's fond of him in any different way, as he's got older?

24. (a) Attached at 16 - MOTHER

- 0 Definitely deeply attached.
- 1 Dubious
- 2 Not deeply attached.
- 9 Not known

52 [

(b) Change in attachment - MOTHER

- 0 More attached
- 1 Same
- 2 Less attached
- 3 Differently, with age
- 8 N.A. - step parent, not known at 8.
- 9 NK

53 [

(c) Attached at 8 - MOTHER

- 0 Definitely deeply attached
- 1 Dubious
- 2 Not deeply attached
- 9 Not known

54 [

(d) Attached at 16 - FATHER

- 0 Definitely deeply attached
- 1 Dubious
- 2 Not deeply attached
- 9 Not known

55 [

(e) Change in attachment - FATHER

- 0 More attached
- 1 Same
- 2 Less attached
- 3 Differently, with age
- 8 N.A. step parent, not known at 8.
- 9 Not known

56 [

(f) Attached at 8 - FATHER

- 0 Definitely deeply attached
- 1 Dubious
- 2 Bot deeply attached
- 8 N.A. - step parent, not known at 8
- 9 Not known

57 [

400

If not attached to either parent at age 16

(g) Do you feel he's closely attached to anyone?

Who?

(h) Would he try to attach himself to anyone who took an interest in him?

(IF STEP-PARENT IN HOME)

(i) What about his father (your previous husband) - do you feel X is still closely attached to him?

II not attached to either parent at age 16

(g) Attachments other than parents at 16

- 0 Deeply attached to someone other than parent.
- 1 No deep attachment to anyone at 16
- 8 Not applicable - attached to parent.
- 9 Not known

58

(h) If not attached to anyone at 16

- 4 Ready to attach self to any person showing an interest.
- 5 Would not form attachments.
- 8 Not applicable - attached to someone.
- 9 Not known

59

(IF STEP-PARENT IN HOME)

(i) Attachment to original parent where step-parent in home.

- 0 Definitely deeply attached
- 1 Dubious
- 2 Not deeply attached
- 8 N/A
- 9 Not known

60

25. Can he confide in you if he is worried about something?

POSSIBLE PROBES:

Do you think there is anything he wouldn't confide in you about?

Is there anything he has confided about recently?

Are there ever times you feel he is worried about something but hasn't talked to you about it?

26. Would he ask for support or advice? (e.g. if bullied, or if he had problems with a teacher at school or if wrongly accused of something he hadn't done?)

27. Would he talk to anyone if he felt very miserable or depressed?

Or would he keep it to himself?

Who would he talk to?

25. Confides
- | | |
|---|-----------------------------|
| 0 | Never |
| 1 | Dubious |
| 2 | Sometimes about some things |
| 3 | Always |

61

26. Would ask for support
- | | |
|---|----------------------------------|
| 0 | No |
| 1 | Dubious |
| 2 | Yes for some things, not for all |
| 3 | Yes, definitely |

62

27. Confide for support in (most important person):

- | | |
|---|---------------------|
| 0 | Nobody |
| 1 | Parent |
| 2 | Other family member |
| 3 | Outside adult |
| 4 | Outside peer |
| 5 | N/A |
| 9 | N/K |

63

28. Do you think you know when X is worried or upset about something before he tells you?

How would you know?

-
29. (a) If he feels ill or has something wrong with him, who usually decides whether he needs to go to the doctor, or is it usually you who decides?

ASK ABOUT LAST TIME: Check:

Within last 18 months? Was it typical? Was it just the average run of illnesses?

PROBE: Who defined the problem as needing or not needing a doctor?

- (b) Who's responsible for making the appointment (if necessary)?
- (c) Does he go in and see the doctor on his own? (i.e. is the child fully responsible for describing the problem to the doctor, or does the parent share this task?)
- (d) Does he take charge of any treatment the doctor recommends - like remembering when to take his tablets or whatever, or are you really the one who is responsible for seeing that he does what the doctor says?

28. Parents feel they realise if child is upset.

- 0 Never
- 2 Dubious
- 3 Sometimes
- 4 Yes
- 9 N.K

64 [

29. Responsibility for medical care.

- (a) defining problem as needing doctor. child/shared/parent
- (b) responsible for making appointment. child/shared/parent/not necessary
- (c) describing the problem to doctor. child/shared/parent
- (d) following recommended treatment. child/shared/parent

- 0 Child responsible for a,b,c and d
- 1 Child responsible for a, shared or split responsibility for b,c,d.
- 2 Shared responsibility for a, child responsible for b,c,d.
- 3 Shared responsibility for a, shared or split responsibility for b,c,d.
- 4 Parent responsible for a, child for b,c,d.
- 5 Parent responsible for a, shared or split responsibility for b,c,d.
- 6 Parent responsible for a,b,c,d.
- 7 Other
- 8 N/A
- 9 N/K

65 [

30. Thinking about school now:

Is he average, above, below?

Do you feel satisfied with that?

- (a) Do you feel satisfied with him, or do you feel he should do better, try harder?
- (b) Are you satisfied with what the school have done?

31. Over the last year, has the school specially got in touch with you at all about his behaviour? (i.e. NOT routine contact - parent evenings etc).

IF YES

What was the problem?

Did the school feel it was serious?

Did you?

32. Has he ever been in any sort of trouble with the police?

30. (a) Satisfaction with child over school work

- 0 Very satisfied
- 1 Reasonably satisfied
- 2 Rather dissatisfied
- 3 Very dissatisfied

66

(b) Satisfaction with school

- 0 Very satisfied
- 1 Reasonably satisfied
- 2 Rather dissatisfied
- 3 Very dissatisfied

67

31. Behaviour at school

- 0 No problems or trivial problem
- 1 Any serious problem
- 9 NK

68

32. Trouble with police

- 0 No
- 1 Yes - what?

69

33. Is there anything else about his development, his behaviour or his nerves that you are concerned about?

GET DETAILS:

-
34. Has he ever been to a doctor or Child Guidance Clinic because you were worried about his behaviour or because he has nervous problems?
Or because the school thought he should go?

IF YES - When?

What was the difficulty?

-
35. Thinking now about some of the things which parents and teenagers sometimes disagree about:

How do you feel about his taste in clothes, in hairstyles?

Do you ever tell him you don't want him to buy or wear some piece of clothing, or wear his hair in a certain way?

(PAST YEAR)

33. Other problems 0 No
1 Anything which cannot be included under other items.

70

34. Child Guidance etc. 0 No
1 Yes

71

35. Clothing/hairstyles 0 No parental comment or approval only.
1 Parental disapproval but no attempt at prohibition - "I've got to put up with it because it's what she wants".
2 Prohibition of clothes or hair style, but ineffective.
3 Prohibition adhered to by child.

72

36. Does he usually go along with the standards you expect of him in the way of behaviour?
Or do you have disagreements with him?

CHECK FOR DISAGREEMENTS OVER:

Staying out late and where he goes:

Money or allowance:

Doing homework:

Helping round the house, tidying room:

Answering back, cheekiness:

Other - what?

IF DISAGREEMENTS:

How often (last 3 months)?

Which parent is usually involved?

-
37. I'd like to turn now to some rather wider issues.
People often talk about teenagers not accepting their parents' codes of behaviour, and I'd like to find out how much of an issue this is with you and X as he is at the moment.
For example - what about religion? Do you see eye to eye with X?
What about politics?
Racism?
What about sexual morality?
Are there other ideas where you feel that X's ideas of right and wrong are very different from yours?

36. Parent-child disagreement on child's activities

Past 3 months:

- 0 No parental comment or approval only.
- 1 Altercation only once in past 3 months.
- 2 3 or more altercations in the last 3 months.
- 3 Weekly or more often, but less than daily.
- 4 Daily or nearly so.
- 9 NK

73

37. Differences in outlook

- 0 Believes no fundamental differences
- 1 Dubious
- 2 Believes fundamental differences in one or more areas.
- 9 NK

74

38. Do you think that later, when X is grown up, maybe with his own family and living his own life, that he will be a very different sort of person than you?

Live in a different way?

Have different sorts of ideas?

I'd like you to imagine a scale where 0% means he'll be absolutely nothing like you and 100% means he'll be completely like you in all respects; broadly, how much percent would he be like you?

Like your husband?

39. If I asked you to look back over the whole of X's life, since he arrived, have things lived up to your expectations?
Is there anything in particular about him which you might have hoped would turn out differently?

(GET DETAILS)

40. Do you think you'll still see a lot of him when he's left home?
Do you think he will still depend on you for some things?
Or consult you about some things?

Do you think you might rely on HIM for support in any way?

For instance, if you were to become ill or widowed?

Is there anything you particularly look forward to when he's older?

38. (a) Similarity as adult - to mother

0	0 - 19%
1	20 - 39%
2	40 - 59%
3	60 - 79%
4	80 - 100%
9	DK

75 [

(b) Similarity as adult - to father

0	0 - 19%
1	20 - 39%
2	40 - 59%
3	60 - 79%
4	80 - 100%
9	DK

76 [

39.

40.

Appendix 3: Construction of parents interview problem score and adolescents interview problem score.

1) Parent Interview Problem Score (PIPS).

This score was based on items from the Parent Interview Schedule (Appendix 2). Scores were first recoded as follows:

(Item no.)	(score)	(recoded to)
5a	3	2
8	1,2,3,4	0
8	5	1
12,13	1	0
12,13	2	1
12,13	3	2
14	1	0
15	4,5	0
15	2,3,6	1
21	3	2
24g	1	2
24g	8	0
6f	1,2	0
6f	3	1
6f	4,5	2

The PIPS score was then computed for each adolescent as the mean score, multiplied by 22, on the following 22 items; 5a, 6f, 6g, 6h, 6i, 6j, 6k, 6l, 6m, 6n, 6o, 7c, 9 to 14, 21, 24a, 24d, 24g; plus the mean score, multiplied by 3, on the following three items; 8, 15, 31. This allowed a score to be computed where there was some missing data, but if data were available for fewer than 21 items, no overall score was computed.

2) Adolescent Interview Problem Score (AIPS).

This score was based on items from the Adolescent Interview Schedule (Appendix 4). Items were first recoded as follows (peer16 refers to the overall rating of peer relationships);

(Item no.)	(score)	(recoded to)
11a	0	2
11a	2	0
13a	1,2,3	0
13a	0	1
13b	1,2,3,	0
13b	0	1
peer16	1,2	0
peer16	3	2
peer16	4,5	2
18	4	2
35	3,4	0
35	2	1

The AIPS score was then computed for each adolescent as the mean score, multiplied by 11, on the following 11 items; 2, 3, 11a, 18, 26a, 31a, 35, 38, 39a, 41, 42; plus the mean score, multiplied by 3, on the following 3 items; 19a, 19b, peer16; plus the mean score, multiplied by 2, on the following 2 items; 13a, 13b; plus the scores on items 28d and 32. This allowed a score to be computed where there was some missing data, but if data were available on fewer than 15 items, no score was computed.

APPENDIX 4
INTERVIEW WITH 16 YEAR-OLDS

NAME: _____

Introductory Comments:

Interviewer should -----

- Introduce self and say that this study is interviewing many 16 year-olds and their families:
 - That she is interested in how 16 year-olds feel about their families, schools and friends and how they fit in:
 - That whatever child says is confidential. Interviewer won't say anything about it to parents, school or anyone else
 - Ask child to answer questions as truthfully as possible. Say there are no right or wrong answers, the interviewer wants to learn from the child and won't be critical of anything said.
 - Ask if the child has any questions, and encourage the child to ask later if any occur to him/her later on.
- (Child from 8 year-old study)
- Say that though child may not remember, interviewer saw child when eight; child read for me and did a test when I talked to parents, but child was really too young then for me to interview. So very glad to have chance to talk with them now they are 16.

1. Are you still at school, or have you left?
How big is/was your school?
Is/was it mixed, or all boys/all girls?
Is/was it racially pretty mixed, or is/was it almost all white kids?
(SCHOOL LEAVERS)
Are you working now?
What are you doing?
-

2. How do (did) you get on with the teachers at school?
(EXPLORE IF EVIDENCE OF ANY DIFFICULTIES)

Is it a personality clash, or just that you don't like some aspects of the teacher?

How does/did the rest of the class get on with them?
-

3. Does (did) it make a lot of difference to your work having a teacher you like - does that affect how hard you work?

2. Relationship with teachers (past year).

No abnormality	Slight difficulties or abnormalities	Marked difficulties or abnormalities	Not know
0	1	2	9

10

3. Liking teachers affects work.

No	Sometimes/ dubious	Definitely - marked likes and/or dislikes affecting work.	Not know
0	1	2	9

11

4. Do (did) you feel that your teachers don't (didn't) take enough notice of you as an individual?
For example, sometimes people feel that teachers just see them as one of the class and don't remember any special things about them, about their personality or their interests or whatever.
-

5. How do you think you get on/are getting on with your school work compared to other girls/boys of your age?
-

6. (Children still at school)

When do you think you will leave school?

Are you hoping to take any exams ? CSE, O level, 'A' level

7. School children

What are you hoping to do when you leave school?

Employed

Are you hoping to stay in your present job, or move on?

Unemployed

What sort of job are you hoping to find?

Are you hoping to get any further education?

What type?

Or training for a job (further training in your job?) What sort?

8. Sometimes teenagers and their parents have different ideas about when they should leave school and what they should do next.

Have you discussed this with your parents?

How do they feel - have they said anything?

What do (did) they want you to do?

9. Are any of the people from school/work, friends of yours?

What are their (first) names?

Are they around your age?

Have you seen (specify names individually) outside school/work in the last week? (I mean to talk to for at least 5 or 10 minutes).

7. After leaving school

- 0 No further education expected
- 1 Government work experience programme, i.e. not geared to a specific job.
- 2 Apprenticeship, sandwich course or other full or part-time training for a job (no professional qualification).
- 3 Training for professional qualification, not degree from university or polytechnic.
- 4 Expecting to go on to University or polytechnic degree.
- 8 Other
- 9 Not known

JOB EXPECTED - verbatim description:

15

8. Discussed plans after leaving school.

- 0 Not discussed
- 1 Parents approve of child's preferred plan.
- 2 Parents indifferent, uninterested.
- 3 Where child has alternative plans, parents prefer one which is not the child's preferred option.
- 4 Parents disapprove but no prohibition.
- 5 Parents disapprove, prohibition but ineffective.
- 6 Parents disapprove, prohibition, child complies.
- 7 Parents divided - one approves, one otherwise.
- 9 Not known

16

9.

10. What about at home - have you any other friends living near you?
What are their names?
Have you seen (specify names of friends individually) in the last week?
Have you seen any other friends in the last week?
What about girls/boys? ASK RE: OPPOSITE SEX
Was last week about the usual in the number of friends you've seen?
-

- 11 (a) Do you have a special friend?
Someone you specially enjoy going out with, or whom you confide in?
(IF FRIEND OF OPPOSITE SEX MENTIONED)
Is he a boyfriend or is (he) a friend who happens to be a boy?
If "friend" -
And do you have a boyfriend as well?
-

12. Do you generally go around in a crowd? I mean in a group
that generally goes around together?
IF YES
Is there someone who tends to act as leader?
Are there (boys) as well as (girls) in the crowd? (OR VICE VERSA)
When did you last go out in the group?
Do any of the other (boys) in the group have (girl) friends?
What about you?

10.

Total number of contacts with peers (past week).

224

(PEER = FRIEND AGED 15-19 YEARS)

	NONE	ONE	TWO/THREE	FOUR/SIX	SEVEN OR MORE	NK	
(a) Same sex	0	1	2	3	4	9	17 <input type="checkbox"/>
(b) Opposite sex	0	1	2	3	4	9	18 <input type="checkbox"/>

Number of different friends seen in past week.

	NONE	ONE	TWO/THREE	FOUR/SIX	SEVEN OR MORE	NK	
(c) Same sex	0	1	2	3	4	9	19 <input type="checkbox"/>
(d) Opposite sex	0	1	2	3	4	9	20 <input type="checkbox"/>

11. Special friend

	<u>NONE</u>	<u>DUBIOUS</u>	<u>DEFINITE</u>	<u>NOT KNOWN</u>	
(a) Same sex	0	1	2	9	21 <input type="checkbox"/>
(b) Opposite sex	0	1	2	9	22 <input type="checkbox"/>

12. (a) Member of "gang", crowd or peer group. (i.e. group of teenagers who regularly go around together.

- 0 None
- 1 Dubious membership
- 2 Definite membership, same sex group.
- 3 Definite membership, mixed sex group.
- 4 Definite membership, same and mixed sex group.
- 5 Definite membership of any but NOT seen in last week.
- 9 Not known

(b) Boyfriend/girlfriend

<u>NONE</u>	<u>DUBIOUS</u>	<u>DEFINITE</u>	<u>NOT KNOWN</u>	
0	1	2	9	23 <input type="checkbox"/>
				24 <input type="checkbox"/>

Do you ever go to the homes of any of your friends?

What about in the past week?

What about to (girl) friends?

Do you have friends back to your home?

What about (girl) friends?

Do you go anywhere else with your friends in the evening? Wimpy bar? Disco?

Have you in the last week?

Or do you ever meet your friends in a special place on the street in an evening?

Where do you go then?

13. (a) Visits to friends' home (in last week).

226

No visit to friends' home in last week.	0	
Visit to home of same sexed friend in last week	1	
Visit to home of opposite sexed friend in last week	2	
Visit to homes of same and opposite sexed friends in last week	3	
Not known	9	25 <input type="checkbox"/>

(b) Visit of friend to own home (past week)

No visit of friend to own house in past week	0	
Visit of same sexed friend to own house in last week	1	
Visit of opposite sexed friend to own home in last week	2	
Visit of same and opposite sexed friends to own home in last week	3	
Not known	9	26 <input type="checkbox"/>

14. (a) To e.g. coffee bar in an evening (i.e. after dark) in the last week:

NEVER	YES - NOT IN LAST WEEK	YES - IN LAST WEEK	NOT KNOWN <input type="checkbox"/>
0	1	2	9
27			

(b) Spending time with friends on street or other open public place (evening) in last week:

NEVER	YES - NOT IN LAST WEEK	YES - IN LAST WEEK	NOT KNOWN <input type="checkbox"/>
0	1	2	9
28			

How do your parents feel about the friends you see?

Have they ever said you shouldn't see any of your friends because they don't approve of them?

IF YES

What did you do?

What about girl friends?

16

Do you ever get teased at school?

What would it usually be about?

Do you think that you get teased more than other boys (girls)?

How do you feel about it?

(IF UPSET, MISERABLE ETC. GET DETAILS)

15. (a) Parental approval of friends (same sex)

No parental comment or approval only	0
Parental disapproval but no prohibition	1
Prohibition of contact with friends but ineffective	2
Prohibition by parents adhered to by child	3
Not known	9

29

(b) Parental approval of friends (opposite sex)

No parental comment or approval only	0
Parental disapproval but no prohibition	1
Prohibition of contact with friends but ineffective	2
Prohibition by parents adhered to by child	3
No friend of opposite sex	8
Not known	9

30

(N.B. LATER IN SCHEDULE THE QUALITY OF PEER RELATIONS IS RATED.)

16. Teased by peers (past year)

Not teased	Teased but no more than other children	Teased somewhat more	Teased a lot more than others	N kno
0	1	2	3	9

31

17.

What about bullying?

Do you get bullied at all?

Do you think you get bullied more than other boys?

Did you get bullied before, ever?

When?

More than other boys?

Do you get into trouble for hitting other boys?

(IF YES)

Do you think you are in trouble for this more than other boys?

Why is that?

18.

People often have times when they feel pretty lonely and would like someone around.

Do you ever feel like that?

(IF YES)

How often?

What sort of times do you get lonely?

How does it make you feel?

What do you do?

Are there times when you feel like this almost every day, or is it only once or twice a month say?

17. (a) Bullied by peers (past year)

Not bullied	Bullied but not more than other children	Bullied somewhat more than other children	Bullied a lot more than other children	NK
0	1	2	3	9

(b) Bullied previously

0/1	2	3	9	32
-----	---	---	---	----

(c) In trouble for hitting other children (past year)

Never	Not more than other children	Somewhat more than other children	A lot more than other children	NK
0	1	2	3	9

34

18. Loneliness (past year)

Never felt	Only rarely- less than once in a month	Occasionally- once or twice in a month	Often- 3+ in a month	Periods when (3) eg school hols, otherwise (2) or (1)	N.K
0	1	2	3	4	9

35

Overall rating of adequacy of peer relationships (past year)

1. Very satisfactory
2. Generally satisfactory - "average".
3. Some significant problems.
4. Unsatisfactory overall - some redeeming features.
5. Very unsatisfactory - serious persisting problems, almost no positives.

SEE LIST OF RATING CRITERIA)

36

19. Nearly everyone gets into trouble for something or other at some time at school.

What sort of things do you get into trouble for?

(Discount minor problems dealt with by class teacher involved, such as being told to stop talking, remembering homework or PT kit next time).

How do you feel about it?

What about outside school?

-
20. I'd like to talk a bit more now about the kind of things you do with your parents and what they're like.

Can you give me an idea of what sort of person your Mum is?

Anything else about her?

And what about your Dad?

Anything else about him?

Is there anything you especially like about your Mum?

Anything else you especially like about her?

What about your Dad - anything you especially like about him?

Anything else?

(Note if child is particularly critical towards either parent - rated at end of schedule)

-
21. Do you ever go out with your parents?

Where do you go?

What do you do?

What about last month?

19. (a) Trouble reported at school (past year)

None	Minor disciplinary infringements only	Occasional definite antisocial or aggressive behaviour	Frequent definite antisocial or aggressive behaviour	NK
0	1	2	3	9

(b) Trouble reported outside school (past year)

37

None	Minor only (scrumping, mischief etc)	Occasional definite antisocial behaviour	Frequent definite antisocial behaviour	NK
0	1	2	3	9

(c) Criticism of school

38

None	One critical remark	2-3	4 or more	NK
0	1	2	3	9

39

21. Out with parents (in last month)

- 0 No or very rarely - 3 times in last year incl. holidays.
- 1 Yes, but not in the last month.
- 2 Occasionally, less than weekly.
- 3 At least once per week in last month.
- 4 Not known

40

22. Did you go on holiday this year?
Summer, Christmas, Easter?
Where did you go?
Who with?
-

23. (School children)

Do you have a job outside school now?
Paper round or Saturday job or anything like that? Babysitting?
Have you in the last month?
How much do you earn (per week) ?

(Left school - unemployed)

Do you get any money from social security? How much?
Do you pay any of that to your parents for your keep? How much?
Do you earn money from anywhere else?
IF YES, What work do you do?
How much money do you get?

(School children and unemployed)

Do you get any money from your parents?
How much do you get? (per week.)
Is that regularly, every week?
Is it payment for some particular job?
Do your parents pay you for doing anything else?
Such as what?
Do you get any allowance to buy your own clothes?
Do you think your parents give you enough? (Check for rows)

(Employed)

Do you pay anything out of your earnings to your parents for your keep?
What do you pay them?
And how much are you earning?

22. Holidays in past year. (Lasting a week or more)

- 0 None
- 1 Yes, with family
- 2 Yes, with extended family, not parents.
- 3 Yes, with friends.
- 4 Yes, with friends of own age and with family. 41
- 5 Yes, with friends on one occasion and family or extended family on another.
- 9 NK

23.

Rate: 0 (No)
 1 (Yes)
 9 (Not known)

Amounts (approx) per week.

Earnings from employment	42	
Social Security	43	
Payment while on YOPS	44	
Earnings from Saturday job, paper-round etc. (outside home)	45	
Regular allowance from parent, covering clothes etc. AND pocket-money	46	
Regular pocket-money, not covering clothes, from parent.	47	
Regular separate clothing allowance from parent.	48	
Clothes bought by parent, or money given to child for specific items of clothing.	49	
Money irregularly given by parents.	50	
Regular payment for job done for parents.	51	
Irregular payments for jobs done for parents	52	

Child contributes to keep from earnings. 53

Child contributes to keep from S.S. 54

Rate

- 0 (No)
- 1 (Yes)
- 9 (Not known)

24. What about buying clothes? Can you choose what clothes to buy?
What do your parents think about your taste in clothes?
Do they try to get you to dress differently from how you would like to?
Do they ever stop you getting the clothes you want?
- What about hairstyles - can you have your hair the way you want it?
What happens if they disagree with what you want?
(Check for rows)

-
25. Have you ever tried smoking?
When was the first time?
How much do you smoke now?
How often?
IF EVER SMOKED
What do your parents feel about it?
Do they ever offer you cigarettes?

24. (a) Parental response to child's clothing (past year)

- 0 No parental comment or approval only.
- 1 Some disapproval of a few items.
- 2 Strong disapproval - parent wants child to dress very differently
- may include ineffective prohibition, i.e. child does not comply.
- 3 Strong parental disapproval or prohibition - child complies unwillingly.
- 9 Not known

55

(b) Parental responses to hairstyle (past year)

- 0 No parental comment or approval only.
- 1 Parental disapproval but no prohibition.
- 2 Prohibition of hairstyle but ineffective.
- 3 Prohibition by parents adhered to by child.
- 9 Not known

56

25. (a) Smoking (past month)

- 0 Never smoked (more than 1 or 2).
- 1 Tried a few but didn't like, didn't go on.
- 2 Smoked in the past but not now.
- 3 Smoked occasionally in past month.
- 4 Smoked regularly in past month (at least 5 days a week)
- 9 Not known

57

(b) Parental response to smoking

- 0 Child never smoked (more than 1 or 2)
- 1 Child smoked previously but gave up for reasons other than parental disapproval
- 2 Parents unaware that child smoked.
- 3 Smokes, parents not disapprove.
- 4 Parents disapproved but not prohibited.
- 5 Prohibited but ineffective.
- 6 Prohibited and adhered to by child.
- 9 Not known

58

26. What about having a drink? Have you ever tried beer or some other sort of alcohol?
When was the first time?
How much do you drink now?
How often? (past month)
What do your parents feel about it?
Do they ever offer you a drink?
Have you ever got drunk/drunken too much?
-

27. Do you help out at all with jobs about the house? (not for pay)
Things like washing-up, washing the car, repairing things, looking after younger sibs?
How often do you help with these things?
Do you do it as a regular thing - I mean are you expected to do it every day or every weekend or whatever it is?

- 0 Never has
- 1 In past but not now
- 2 Occasionally in past month (1 - 5 occasions)
- 3 5+ occasions in the past month
- 9 not known

(b) Parents response to drinking

59

- 0 Child never has
- 1 Child drank previously but gave up for reasons other than parental disapproval
- 2 Parents unaware that child drinks.
- 3 Drinks, parents don't disapprove.
- 4 Parents disapprove but don't prohibit.
- 5 Prohibited, ineffectively.
- 6 Prohibition adhered to by child.
- 9 Not known

60

27. Housework and repairs (past month)

- 0 Never done by child.
- 1 Occasionally only, not in the past month
- 2 Several times a week but not regularly.
- 3 Regularly but less than daily.
- 4 Regularly and daily.
- 9 Not known

61

Do your parents think you should be in bed by a particular time at night?

What happens if they think you are up too late?

What about if you go out in the evening, do they feel you should be in by a certain time? Do you agree about it?

What happens if you are late?

Do your parents expect you to let them know where you are?

How much detail? Who with? Where? Phone number? How getting home?

What happens if you don't?

Are there other things they feel you ought to do? Do you ever disagree?

Are there things you would like to do that they don't allow you to do?

Do you ever discuss these things with them?

Do you generally agree with them about what they think you should be allowed to do?

Do you feel your parents are more strict or less strict than other parents in allowing you to do what you want?

28. (a) Child's perception of parental strictness. (b) Child's attitude to rules

- 0 No parental restrictions
- 1 Less strict
- 2 About average
- 3 Generally average but a few restrictions felt to be severe
- 4 More strict
- 5 Very much more strict
- 9 Not known

62

- 1 Child feels too much control.
- 2 Child feels structure about right in most areas. too much in a few.
- 3 Child feels level of structure about right.
- 4 Child feels too little structure.
- 9 Not known

63

(c) Parental disapproval of child's activities, time in and time to bed (past year).

- 0 No parental comment or approval only.
- 1 Parental disapproval but no prohibition
- 2 Prohibition of activities or times in, but ineffective.
- 3 Prohibition by parents adhered to by child.
- 9 Not known

64

(d) Parent-child disagreement on child's activities (in past month)

- 0 No parental comment or approval only. (Check also on past 3 mths)
- 1 Altercation once only in past month.
- 2 2-3 altercations in past month.
- 3 Weekly or more often (but less than daily)..
- 4 Daily or nearly daily
- 9 Not known

65

(e) Altercation mainly with father or mother

- 0 No altercation in past month (Check also on past 3 mths)
- 1 Altercations mainly with mother.
- 2 Altercations mainly with father.
- 3 Altercations mainly with both parents together.
- 4 Altercations mainly with one parent at a time, but frequency with each approximately equal.
- 9 Not known

66

29. When your parents are making plans - like where to go for an outing or for holidays, do you like them to ask your opinion?

Do they ask your opinion?

If NO, do you think they should?

What sort of things would you like them to ask your opinion about?

30. What are the sort of things that make you most upset or angry

at home?

What else?

(NOTE IF CHILD IS PARTICULARLY CRITICAL TOWARD EITHER PARENT -
RATED AT END OF SCHEDULE)

31. OMIT IF NO SIBS

What are your brothers and sisters like?

How do you get on with them?

Which do you get on best with?

What do you like doing with him/her?

Most brothers and sisters squabble sometimes; how often do you squabble?

What would it usually be about?

Who would it usually be with?

What happens?

29. (a) Child wishes to be consulted

(b)

Child feels consulted enough

242

- 1 Never
- 2 Dubious
- 3 Sometimes
- 4 Yes
- 9 Not known

- 1 Never
- 2 Dubious
- 3 Sometimes
- 4 Yes
- 9 Not known

67

68

30.

31. (a) Relationships with sibs (past year)

No or only trivial difficulties in relationship	Slight difficulties only	Marked difficulties	No sib	Not known
0	1	2	8	9

(b) Where child has more than one sib

Slight differences in how well child gets on with diff. sibs - eg on account of their age and sex.	Marked differences eg allies with one sib, antagonist of another.	One or no sib	Not known
0	1	8	9

69

70

2. What would you do if you were making something at home which wasn't going right and you wanted some help?
-

3. Of all the people in the family and outside, who knows best what you're really like as a person?
-

4. If you were really happy about something that had gone right for you, which person, either inside or outside the family, would you want to be the first to know?
-

5. What do you do if you are feeling upset or worried - would you tell anyone?
Do you think anyone notices before you tell them?
Do you think your parents know when you are worried or upset about something?
IF YES
How would they know?

32. Child can ask for help

- 1 Never
 2 Dubious
 3 Sometimes
 4 Yes
 9 Not known

71

33.

Nobody	Parent	Other adult within family	Sib.	Adult outside family	Peer (outside family)
0	1	2	3	4	5

72

34.

Nobody	Parent	Other adult within family	Sib	Adult outside family	Peer (outside family)
0	1	2	3	4	5

73

35. Child feels parents realise if he is upset

- 1 Never
 2 Dubious
 3 Sometimes
 4 Yes
 9 Not known

74

36. (a) I suppose everyone worries about some things. What sort of things do you get worried about? (Past year)

(b) Does worrying ever interfere with what you're doing so you can't concentrate?

(c) Can you stop worrying when you want to?

(d) Are you ever kept awake by worries?

(e) Does it affect your eating when you're worried?

(f) Have you been to see a doctor or anyone because of worrying? (Include loss of sleep or appetite because of worrying).

36. (a) Overall worrying/ruminations

246

None	Dubious	Definite	Not known
0	1	2	9

75

(b) Interference with concentration

None	Dubious	Definite	Not known
0	1	2	9

76

(c) Can stop worrying

Yes, can stop	Dubious	No cannot stop
0	1	2

77

(d) Sleeping disturbance

No	Dubious	Yes	Not known
0	1	2	9

78

(e) Eating affected

No	Dubious	Yes	Not known
0	1	2	9

79

(f) Doctor

No	Yes	Not known
0	2	9

80

7. If you were really worried about something, e.g. about something being wrong with you, who would you go to to talk about it with?

Or would you keep it to yourself?

37. NEVER DUBIOUS SOMETIMES YES NOT KNOWN

(a) Can confide

0 1 2 3 9 10

(b) Confide in:

NOBODY	PARENT	OTHER FAMILY MEMBER	ADULT OUTSIDE FAMILY	PEER OUTSIDE	NOT KNOWN
0	1	2	3	4	9

11

Do you find yourself getting frightened in certain situations, or.....

Are there special things that frighten you?

For example, some boys get worried and upset going to school in the morning - do you ever feel like that?

What about getting changed for P.E. at school or undressing when other people are there?

Being in a crowd.

Meeting new people.

Going to a party.

Being left alone in the house?

Being in the dark?

Going on a bus or a train?

Also some boys are frightened of animals - such as dogs or cats?

Insects?

Heights?

What about injections?

(GET DETAILS SUFFICIENT FOR RATING WHENEVER FEAR REPORTED -
WRITE OUT FULL DESCRIPTION)

Does child try and avoid situation?

38. Situation - specific anxiety

NIL - NOT AFRAID	SOMEWHAT AFRAID NEEDS REASSURANCE	MARKED FEAR CAN INCLUDE AVOIDANCE	NOT KNOWN
0	1	2	9

Going to school	
Undressing	
Crowds	
Meeting new people	
Going to a party	
Being left alone in the house	
Dark	
Buses/trains/other vehicles	
Dogs	
Other animals	
Insects	
Heights	
Injections	
Other situation specific fear	

SPECIFY

.....

.....

NO FEARS OR SOMEWHAT AFRAID(1) OF 1 OR 2 THINGS	1 OR 2 MARKED FEARS (2) OR 3-5 FEARS ALT.	3 OR MORE MARKED FEARS (2) or 6 OR MORE ALT	NOT KNOW
0	1	2	9

IF YES

How bad do you feel at those times?

Do you ever cry?

Do you feel sometimes that you just want to get away from it all?

Or to run away?

Could you remember the last time you felt really miserable - what was it about?

How bad did you feel?

Yes to any of these indicates rating of 1 or 2 depending on further responses

How long did it last, feeling miserable that time?

(b) How long ago was that? (CHECK HOW OFTEN IN LAST THREE MONTHS)

(c) Does it affect your eating when you're feeling depressed or miserable? (INCLUDE POOR APPETITE AND STUFFING FOOD)

(d) Can you get on with your work/schoolwork all right when you feel like that? (CAN'T CONCENTRATE - NOT INTERESTED - CAN'T COPE)

(e) Does it interfere with your sleep? (CHECK FOR EARLY WAKING)

(f) Have you been to see a doctor or anyone because of feeling depressed or miserable? (INCLUDE CONSEQUENT EATING/SLEEPING DISTURBANCES - PAST YEAR)

IF APPROPRIATE

(g) Have you ever felt like ending it all?

39. Misery/depression(a) Misery/depression

<u>None</u>	<u>Slight</u>	<u>Marked</u>	<u>Not known</u>	
0	1	2	9	13 <input type="checkbox"/>

(b) Frequency

<u>Not in last 3 mths</u>	<u>1-3 times in last three months</u>	<u>4+ times in last three months</u>	<u>Not known</u>	
0	1	2	0	14 <input type="checkbox"/>

(c) Eating

<u>No</u>	<u>Dubious</u>	<u>Affecting eating</u>	<u>Not known</u>	
0	1	2	9	15 <input type="checkbox"/>

(d) Work

<u>Yes OK</u>	<u>Sometimes</u>	<u>Affects work</u>	<u>Not known</u>	
0	1	2	9	16 <input type="checkbox"/>

(e) Sleep

<u>No</u>	<u>Dubious</u>	<u>Yes affects sleep</u>	<u>Not known</u>	
0	1	2	9	17 <input type="checkbox"/>

(f) Doctor

<u>No</u>	<u>Yes</u>	<u>Not known</u>	
0	2	9	18 <input type="checkbox"/>

(g) Suicidal thoughts

<u>No</u>	<u>Yes</u>	<u>Not known</u>	
0	2	9	19 <input type="checkbox"/>

40. (a) Could you talk to anyone about feeling very miserable (or if you felt very miserable?)

(b) Who would you talk to?

41. Do you feel that what happens to you is less important than what happens to other people - that you don't matter very much?

42. Sometimes when people are feeling low they get the feeling that other people are looking at them or talking about them or laughing at them. Do you ever feel like that?

43. Would you tell anyone if a boy in your street was threatening to hurt you, or if a teacher at school was treating you unfairly?

Who would you tell?

IF PARENT

Would you always tell them, or are there some things you wouldn't tell your parents?

40. Confide : for support in -

254

<u>NOBODY</u>	<u>PARENT</u>	<u>OTHER FAMILY MEMBER</u>	<u>OUTSIDE FAMILY ADULT</u>	<u>OUTSIDE PEER</u>
0	1	2	3	4
				20

41. Self-depreciation

<u>None</u>	<u>Slight</u>	<u>Definite</u>	<u>Not known</u>
0	1	2	9
			21

42. Ideas of reference

<u>None</u>	<u>Dubious</u>	<u>Definite</u>	<u>Not known</u>
0	1	2	9
			22

43. Child can ask parents for protection

1	Never
2	Dubious
3	Sometimes
4	Yes
9	Not known

23

44. I expect you've noticed that I've asked a lot of questions about who you would talk to about different things.
Now I'd like to ask some more.

I'm interested in who you would talk to if there was something personal you felt worried about.

For example, sometimes (boys) worry about how they look - maybe you've had that sort of worry sometimes? (Example?)

(...like girls worry about their faces or their figure or getting spots...)

(...like boys worry about their face or whether they've got enough muscle or getting spots...)

Some boys keep that sort of worry to themselves, and some talk about it with their friends or their Mum or someone else. What about you?

45. Another worry that boys often have is that girls might not like them, or might not want to go out with them?
Who would you talk to if you had that sort of worry, or would you keep it to yourself?
-

46. Sometimes people find it a bit embarrassing saying who they would talk to about things like that. I hope it's OK for you?

I decided to ask everyone to write down their answers to the next few questions. They are all about who you would talk to in various difficult personal situations.

Could you write in whether you would keep things to yourself, or who would you talk to - write in who the person would be, like "my friend" rather than just "John" or "Mary" because I might not know who John or Mary was. Tell me if there's anything that isn't clear to you, or you want to tell me about more.

AS CHILD FINISHES ASK :

Would you put a tick by any one where you actually have talked to someone about it?

Keep the bit of paper because I want to ask you to put your own answer to the next question too, on the other side:

44. Confide worry about appearance

Keep to self	Parent	Sib	Peer	Adult outside family	N.A.	Not
0	1	2	3	4	8	

NOTE WHO, AND WHETHER CHILD WOULD CONFIDE IN MORE THAN ONE PERSON OR CATEGORY OF PERSONS.

24

45. Confide worry about being liked by opposite sex

Keep to self	Parent	Sib	Peer	Adult outside family	N.A.	No
0	1	2	3	4	8	

46. Rate child answers:

<u>Would confide:</u>	0	No one
	1	Parent
	2	Sib
	3	Peer
	4	Adult outside family
	8	N.A.
	9	Not known.

Child indicates she/he has actually talked about the subject: 0 No
1 Yes

<u>Questions</u>	<u>Would confide</u>	<u>Has actually discussed</u>
1. (body)	26 <input type="text"/>	27 <input type="text"/>
2. (money)	28 <input type="text"/>	29 <input type="text"/>
3. (boyfriend)	30 <input type="text"/>	31 <input type="text"/>
4. (contraception)	32 <input type="text"/>	33 <input type="text"/>
5. (pregnancy)	34 <input type="text"/>	35 <input type="text"/>

47. Do you think that when you're grown up, maybe with your own family and living your own life, that you'll be a very different sort of person from your parents?

Live in a different way?

Have different sorts of ideas?

Imagine a scale of 0 to 100% with 0 meaning nothing like your parents at all and 100% meaning like them in every possible way. How much percent like them would you be?

(EXPLORE FOR most important ways in which child feels he will be like/unlike either parent).

48. How will you decide when you want to leave home?

-
49. If your parents couldn't look after themselves when they get old, who do you think would help to look after them?
-

47. 1. Adoption/fostering mentioned
 2. Not mentioned
 8. Not applicable (all restored and comparison children) 36

RATE CHILD ANSWER 1 Very unlike parents.
 2
 3
 4 Very like parents. 37

<u>PERCENT LIKE MOTHER</u>		<u>PERCENT LIKE FATHER</u>	
0	0-19%	0	0-19%
1	20-39%	1	20-39%
2	40-59%	2	40-59%
3	60-79%	3	60-79%
4	80-100%	4	80-100%
9	Not known 38 <input type="checkbox"/>	9	Not known 39 <input type="checkbox"/>

48. Main reason:
- 0 Child centred reason (marriage, education etc)
 - 1 Parent centred reason
 - 2 Discharge from care mentioned (foster ch)
 - 3 Age grounds only (16-19 years)
 - 4 Age grounds only (20 years+)
 - 9 Not known
- 40

49. Look after parents.
- 0 Index child (as only child)
 - 1 Index child only
 - 2 Index child and same status sibs
 - 3 Index child and sibs regardless of status
 - 4 Biological children of parents only
 - 5 Other relatives of parents
 - 6 Outside family
 - 9 Not known
- 41

1. Do you intend to have children of your own when you are grown up?

1. Do you know what it means to adopt a child?

When you are grown up do you think you might want to adopt a child?

Do you know what it means to foster a child?

When you are grown up do you think you might want to foster a child?

CHAT - CHILD'S INTERESTS/ NEXT HOLIDAY PLANS/
ANY COMMENTS OR QUESTIONS ABOUT THE INTERVIEW?

50. Children

- 0 No
- 1 Uncertain
- 2 Yes
- 9 Not known

42

51.(a) Adopt

(b) Foster

- 0 No
- 1 Uncertain
- 2 Yes
- 9 Not known

- 0 No
- 1 Uncertain
- 2 Yes
- 9 Not known

43

44

52. (a) Particularly critical towards mother.

No

Yes

(a) Particularly critical towards mother.

0

1

45

(b) Particularly critical towards father.

0

1

46

CHECK QUESTIONS 20 AND 30

APPENDIX 5 QUESTIONNAIRE ABOUT SOCIAL DIFFICULTY

This questionnaire contains a list of items about social situations which many people find difficult. There are four possible answers to each item. You should circle the letter on the answer sheet corresponding to the answer which indicates how you feel. So for item (1) the question is "Do you feel shy with strangers?" - the possible answers are: Very shy/quite shy/a little shy/not shy at all. If you feel very shy with strangers, you should circle 1(a). If you feel quite shy you should circle 1(b), and so on.

Please read the questions carefully

1. Do you feel shy with adults?

(a) Very shy	(b) Quite shy
(c) A little shy	(d) Not shy at all.

2. Do you find it hard to make friends in a new place?

(a) Very hard	(b) Quite hard
(c) A bit hard	(d) Not hard at all

3. Do you stammer or stutter when you talk?

(a) Always	(b) Often
(c) Sometimes	(d) Never

4. How many friends have you?

(a) A lot	(b) A few
(c) One	(d) None

5. Do you feel worried about using the telephone?

(a) Very worried	(b) Quite worried
(c) A bit worried	(d) Not worried at all.

6. Do you find it hard to take orders from an adult?

(a) Very hard	(b) Quite hard
(c) A bit hard	(d) Not hard at all.

7. How many boys and girls don't like you?

(a) A lot	(b) A few
(c) One	(d) None

8. How shy do you feel with girls?

(a) Very shy	(b) Quite shy
(c) A bit shy	(d) Not shy at all

9. How shy do you feel with boys?
- (a) Very shy (b) Quite shy
(c) A bit shy (d) Not shy at all
10. Do you find it hard to stand up for yourself?
- (a) Very hard (b) Quite hard
(c) A bit hard (d) Not at all hard
11. How afraid are you to ask a girl to go to a party or disco?
- (a) Very afraid (b) Quite afraid
(c) A bit afraid (d) Not afraid at all
12. How afraid are you to ask a boy to go to a party or disco?
- (a) Very afraid (b) Quite afraid
(c) A bit afraid (d) Not afraid at all
13. How worried are you about going on a bus on your own?
- (a) Very worried (b) Quite worried
(c) A bit worried (d) Not at all worried
14. How hard is it to keep your temper when an adult won't let you do something?
- (a) Very hard (b) Quite hard
(c) A bit hard (d) Not at all hard
15. How often do you get teased?
- (a) A lot (b) Quite a lot
(c) Seldom (d) Never
16. How often do adults tell you off?
- (a) Very often (b) Quite often
(c) Seldom (d) Never
17. How often do you lose your temper?
- (a) Very often (b) Quite often
(c) Seldom (d) Not at all
18. How easily do you get embarrassed?
- (a) Very easily (b) Quite easily
(c) Not easily (d) Not ever

19. How often do you get into fights and arguments with other boys and girls?

- | | |
|----------------|-----------------|
| (a) Very often | (b) Quite often |
| (c) Seldom | (d) Never |

20. Is it difficult for you to keep out of trouble?

- | | |
|---------------------|--------------------------|
| (a) Very difficult | (b) Quite difficult |
| (c) A bit difficult | (d) Not at all difficult |

21. Do you find it hard to talk to adults?

- | | |
|----------------|----------------------|
| (a) Very hard | (b) Quite hard |
| (c) A bit hard | (d) Not at all hard. |

22. How many of your friends are a bad influence on you?

- | | |
|-------------------|------------------|
| (a) All of them | (b) Many of them |
| (c) A few of them | (d) None of them |

23. How often do you get bullied by other boys and girls?

- | | |
|----------------|-----------------|
| (a) Very often | (b) Quite often |
| (c) Seldom | (d) Not at all |

24. Do you feel uncomfortable at parties or discos?

- | | |
|-------------------------|------------------------------|
| (a) Very uncomfortable | (b) Quite uncomfortable |
| (c) A bit uncomfortable | (d) Not at all uncomfortable |

25. Do you feel nervous with adults you don't know?

- | | |
|-------------------|-------------------|
| (a) Very nervous | (b) Quite nervous |
| (c) A bit nervous | (d) Not at all |

26. Do you find it hard to talk to girls?

- | | |
|----------------|----------------|
| (a) Very hard | (b) Quite hard |
| (c) A bit hard | (d) Not at all |

27. Do you find it hard to talk to boys?

- | | |
|----------------|----------------|
| (a) Very hard | (b) Quite hard |
| (c) A bit hard | (d) Not at all |

28. Do you find it hard to get on with boys of your own age?

- | | |
|----------------|---------------------|
| (a) Very hard | (b) Quite hard |
| (c) A bit hard | (d) Not at all hard |

29. Do you find it hard to get on with girls of your own age?
(a) Very hard (b) Quite hard
(c) A bit hard (d) Not at all hard.
30. Do you feel uncomfortable if you are the centre of attention in a group?
(a) Very uncomfortable (b) Quite uncomfortable
(c) A bit uncomfortable (d) Not at all
31. Do you find it hard to make friends with boys?
(a) Very hard (b) Quite hard
(c) A bit hard (d) Not at all
32. Do you find it hard to make friends with girls?
(a) Very hard (b) Quite hard
(c) A bit hard (d) Not at all
33. How much trouble do you have getting on with your parents?
(a) A lot (b) Quite a lot
(c) A little (d) None
34. Do you find you are cheeky to your parents?
(a) Often (b) Quite often
(c) Seldom (d) Never
35. Do you find it hard to go to an adult for help if you have a problem?
(a) Very hard (b) Quite hard
(c) A bit hard (d) Not at all hard
36. Do you worry that you might make a fool of yourself in front of people?
(a) A lot (b) Quite a lot
(c) A little (d) Not at all
37. Do you wish you had more friends?
(a) A lot more (b) A few more
(c) One more (d) No more
38. Do you find it hard to keep your temper when an adult tells you off?
(a) Very hard (b) Quite hard
(c) A bit hard (d) Not hard at all

39. How hard is to 'phone a girl and ask her to go to a party?
(a) Very hard (b) Quite hard
(c) A bit hard (d) Not hard at all
40. How hard is to 'phone a boy and ask him to go to a party?
(a) Very hard (b) Quite hard
(c) A bit hard (d) Not hard at all
41. How difficult is it to go into a room full of people?
(a) Very difficult (b) Quite difficult
(c) A bit difficult (d) Not at all difficult
42. How difficult is it to meet adults you don't know?
(a) Very difficult (b) Quite difficult
(c) A bit difficult (d) Not at all difficult
43. Is it hard to be with people you don't know very well?
(a) Very hard (b) Quite hard
(c) A bit hard (d) Not a bit hard
44. How many friends came to your house to see you last week?
(a) More than 5 (b) More than 3
(c) More than 1 (d) None
45. How many friends have come to your house to see you in the last fortnight?
(a) More than 5 (b) More than 3
(c) More than 1 (d) None
46. How many times have you been in a friend's house in the last week?
(a) More than 5 (b) More than 3
(c) More than 1 (d) None

APPENDIX 6

CONFIDENTIAL

THOMAS CORAM RESEARCH UNIT

16-year old follow-up

Teacher's Questionnaire:

NAME OF CHILD.....SCHOOL.....

Please circle the most appropriate answer, basing your judgement on the child's behaviour in the past 12 months; and feel free to consult with other staff where necessary to arrive at an answer. Please add any other comments you wish to make, using a separate sheet if necessary.

<p>1) Overall, is the child's achievement about average for his year?</p> <p>2) Is the child taking CSF's? 0 levels?</p>	<p>above average</p> <p>no</p> <p>no</p>	<p>average</p> <p>yes</p> <p>yes</p>	<p>below average (how many?)</p> <p>.....</p>
<p>3) In relationships with <u>adults</u>, is the child:</p> <p>4)</p> <p>5)</p> <p>6)</p> <p>7) Does he try to get a lot of attention from adults? If yes, please give an example -</p>	<p>more shy than average</p> <p>more withdrawn than average</p> <p>more friendly than average</p> <p>more aggressive than average</p> <p>yes</p>	<p>average</p> <p>average</p> <p>average</p> <p>average</p> <p>no</p>	<p>less shy</p> <p>less withdrawn</p> <p>less friendly</p> <p>less aggressive</p> <p>not known</p> <p>.....</p> <p>.....</p>
<p>8) Does he have marked likes or dislikes of particular teachers (more so than other children)?</p> <p>9) Is adult approval particularly important for this child?</p>	<p>yes</p> <p>yes</p>	<p>no</p> <p>no</p>	<p>not known</p> <p>not known</p>

- 10) Would you say he was more or less popular with his peers than other children in his class?
- 11) Does he have one or two particular friends?
- 12) If yes, were the same children his particular friends a month ago?
- 13) Are they the same sex as the child?
1)
2)
- 14) Does he go around with a group of friends?
- 15) If yes - is it the same group over a period of time - e.g. the last month?
- 16) Does the group contain both boys and girls, or one sex only?
- 17) Do other children sit next to him readily?
- 18) At break or lunchtime: does he try to spend the time mostly with a teacher around. (e.g. in lunchtime clubs run by teacher, Quiet Room, Library?)
- 19) Does he tend to be left till near the end when children are choosing teams or groups; and/or do other children object to being paired with him for work or games?
- 20) Has the child been referred to a Child Guidance Clinic, the Schools Psychological Service, or similar agency?

	more popular	about average	less popular	not known
	yes	no	not known	
	yes	no	not known	
1)	yes	no		
2)	yes	no		
	yes	no	not known	
	yes	no	not known	
	both sexes	all boys	all girls	
	often	sometimes	hardly ever	not known
	often	sometimes	hardly ever	not known
	often	sometimes	hardly ever	not known
	yes	no		

If yes: please give -

- 1. Agency.....
- 2. When referred.....
- 3. Difficulties leading to referral.....
.....

SIGNED.....

DATE.....

THANK YOU FOR YOUR HELP
PLEASE RETURN TO JILL HODGES,
THOMAS CORAM RESEARCH UNIT,
41, BRUNSWICK SQUARE, LONDON WC1N 1AZ.

BIBLIOGRAPHY

Ainsworth, MDS (1962) The effects of maternal deprivation: a review of findings and controversy in the context of research strategy. In Deprivation of Maternal Care: A reassessment of its effects. W.H.O. Public Health Papers no. 14, W.H.O., Geneva, p.97-165.

Ainsworth, MDS, Blehar, MC, Waters, E, and Wall, S (1978) Patterns of Attachment Lawrence Erlbaum Associates; Hillsdale, New Jersey.

Anon (c.1978) A Memorial Concerning the Erecting in the City of London or the Suburbs thereof an Orphanatrophly or Hospital for the Reception of Poor Cast-Off Children or Foundlings.

Belsky, J, and Isabella, R (1988) Maternal, infant, and social-contextual determinants of attachment security. In J Belsky and T Nezworski, (eds) Clinical Implications of Attachment, Lawrence Erlbaum Associates, Hillsdale, New Jersey, p.45-94.

Beres, D, and Obers, SJ (1950) The Effects of Extreme Deprivation in Infancy on Psychic Structure in Adolescence: A Study in Ego Development. The Psychoanalytic Study of the Child, 5, p.212-235.

Bloom, BS (1964) Stability and Change in Human Characteristics. New York: Wiley.

Bodman, F (1950) Constitutional factors in institution children. Journal of Mental Science, 96, p 245-253.

Bodman, F, Mackinley, M, and Sykes, K (1950) The Social Adaptation of Institution Children. The Lancet, 258, p. 173-176

Bohman, M. (1971) A comparative study of adopted children, foster children and children in their biological environment born after unwanted pregnancies. Acta Paediatrica Scandinavica Suppl.221.

Bohman, M, and Sigvardsson, S (1985) A prospective longitudinal study of adoption. In Nicol, AR (ed) Longitudinal Studies in Child Psychology and Psychiatry, John Wiley, Chichester, p.137-155.

Bowlby, J (1944) Forty-four juvenile thieves: their characters and home life. International Journal of Psychoanalysis, 25, p 19-52.

Bowlby, J (1951) Maternal Care and Mental Health. W.H.O., Geneva.

Bowlby, J (1965) Child Care and the Growth of Love. 2nd edition. Penguin Books.

Bowlby, J (1969, second edition 1982) Attachment and Loss, vol 1, Attachment. Hogarth Press, London.

Bowlby, J (1973) Attachment and Loss, vol 2, Separation, Anxiety and Anger. Hogarth Press, London.

Bowlby, J (1980) Attachment and Loss, vol 3, Loss, Sadness and Depression. Hogarth Press, London.

Bowlby, J (1988A) A secure base: clinical applications of attachment theory. Routledge, London.

Bowlby, J (1988B) Developmental Psychiatry comes of age. American Journal of Psychiatry, 145, p 1-10.

Bowlby, J, Ainsworth, MD, Boston, M, and Rosenbluth, D (1956) The effects of mother-child separation: a follow-up study. British Journal of Medical Psychology, 29, p. 211-247.

Brossard, M, and Decarie, TG (1971) The effects of 3 kinds of perceptual and social stimulation on the development of institutionalised infants. Early Child Development and Care, 1, 1, p. 111-130.

Burlingham, D, and Freud, A (1944) Infants Without Families: The case for and against Residential Nurseries. Allen and Unwin: London. Also in The Writings of Anna Freud vol 3, International Universities Press Inc., New York.

Cadore, RJ, and Cain, C (1980) Sex differences in predictors of antisocial behaviour in adoptees. Archives of General Psychiatry 37 p.1171-1175.

Casler, L (1968) Perceptual Deprivation in Institutional Settings. In G Newton and S Levine (eds) Early experience and Behaviour. Charles C Thomas, Springfield, USA.

Cassidy, J, and Kobak, RR (1988) Avoidance and its relation to other defensive processes. In J Belsky and T Nezworski, (eds) Clinical Implications of Attachment, Lawrence Erlbaum Associates, Hillsdale, New Jersey, p.300-323.

Chess, S (1953) The adopted child grows up. Child Study 30 p.6-8.

Chess, S, and Thomas, A (1982) Infant bonding: mystique and reality. American Journal of Orthopsychiatry, 52, p213-222.

Clarke, ADB, and Clarke, AM (1976) Early Experience: Myth and Evidence. Free Press: New York.

Clarke, ADB, and Clarke, AM (1979) Early Experience: its limited effect upon later development. In Shaffer, D, and Dunn, J, (eds) The First Year of Life: Psychological and Medical Implications of Early Experience. John Wiley and Sons, Chichester, p.135-151.

Clarke, AM (1982) Developmental Discontinuities: An Approach to Assessing Their Nature. In Bond, LA and Joffe, JM, (eds) Facilitating Infant and Early Childhood Development. University Press of New England, Hanover, NH., p.58-77.

Clarke, AM, and Clarke, ADB (1985) Life span development and psychosocial intervention. In Clarke, AM, Clarke, ADB, and Berg, J (eds) Mental Deficiency: The Changing Outlook. (4th edition) Methuen: London.

Clarke, AM, Clarke, ADB, and Berg, J (1985) The changing outlook. In Clarke, AM, Clarke, ADB, and Berg, J (eds) Mental Deficiency: The Changing Outlook. (4th edition) Methuen: London, p.3-26.

Clarke-Stewart, KA (1973) Interaction between mothers and their young children; characteristics and consequences. Monographs of the Society for Research in Child Development, 15, 38, 6-7.

Crittenden, PM (1988) Distorted patterns of relationships in maltreating families: the role of internal representation models. Journal of Reproductive and Infant Psychology, 6, 183-199.

Davis, K (1947) Final note on a case of extreme isolation. American Journal of Sociology, 52, p432-437.

Dennis, W (1941) Infant development under conditions of restricted practice and minimal social stimulation. Genetic Psychology Monographs, 23 143-189.

Dennis, W (1973) Children of the Creche. Appleton-Century-Crofts, New York.

Dennis, W, and Najarian P (1957) Infant development under environmental handicap. Psychological Monographs 71, no.436

Donzelot, J (1977) La Police des Familles. Editions de Minuit, Paris.

Emde, RN (1983) (ed.) Rene A Spitz: Dialogues from Infancy. Selected Papers. International Universities Press, New York.

Emde, RN (1984) The affective self; continuities and transformations from infancy. In JD Call, E Galenson and RL Tyson (eds.) Frontiers of Infant Psychiatry vol 2, Basic Books, New York, p.38-54.

Emde, RN (1988) Development Terminable and Interminable. 1: Innate and motivational factors from infancy. International Journal of Psychoanalysis, 69, 1, 5-42.

Fraiberg, S (1983) Infant Mental Health. In Emde, RN, (ed), Rene A Spitz: Dialogues from Infancy. Selected Papers. International Universities Press, New York, p. 442-444.

Freud, A (1966) Normality and Pathology in Childhood: Assessments of Development. Hogarth Press, London.

Gaensbauer, TJ, and Harmon, RJ (1982) Attachment Behaviour in Abused/Neglected and Premature Infants; Implications for the Concept of Attachment. In Emde and Harmon (eds.) The Development of Attachment and Affiliative Systems, London and New York, Plenum Press, ch.17.

Gardner, DB, Hawkes, GR, and Burchinal, LG (1961) Noncontinuous mothering in infancy and development in later childhood. Child Development, 32, 225-234.

Gesell, A (1929) Maturation and infant behaviour pattern. Psychological Review 36, 307-319.

Goldfarb, W (1943a) Infant Rearing and Problem Behaviour. American Journal of Orthopsychiatry, April 1943, 249-265.

Goldfarb, W (1943b) The Effects of Early Institutional Care on Adolescent Personality. Journal of Experimental Education, 12, 106-129.

Goldfarb, W (1944) Infant Rearing as a factor in foster home replacement. American Journal of Orthopsychiatry, 14, 1, p.162-166.

Goldfarb, W (1945a) Effects of psychological deprivation in infancy and subsequent stimulation. American Journal of Psychiatry, 102, 18-33.

Goldfarb, W (1945b) Psychological privation in infancy and subsequent adjustment. American Journal of Orthopsychiatry, 15, 247-255.

Goldfarb, W (1947) Variations in Adolescent Adjustment of Institutionally-Reared children. American Journal of Orthopsychiatry, 17, 449-457.

Hakimi-Minesh, Y, Mohdehi, J, and Tashakkori, A (1984) Short Communication: Effects of environmental enrichment on the mental and psychomotor development of orphanage children. Journal of Child Psychology and Psychiatry, 25, 4, 643-650.

Hebb, DO (1949) The organisation of behaviour: a neuropsychological theory. Wiley, New York

Heston, LL, Denney, DD, and Pauly, IB (1966) The Adult Adjustment of Persons Institutionalised as Children. British Journal of Psychiatry, 112, 1103-1110.

Hinde, R (1963) The Nature of Imprinting. in BM Foss (ed) Determinants of Infant Behaviour vol 2, Methuen, London.

HMSO (1946) Report of the Care of Children Committee (the "Curtis Report").

HMSO (1967) Report of the Central Advisory Council for Education (the "Plowden Report)

Holmes, E (1983) Psychological Assessment. In M Boston and R Szur (eds) Psychotherapy with severely deprived children. Routledge and Kegan Paul, London.

Hoopes, JL (1982) Prediction in Child Development. Child Welfare League of America, New York.

Hunt, J McV (1961) Intelligence and Experience. Ronald Press, New York.

Hunt, J McV (1979) Psychological Development: Early Experience. Annual Review of Psychology, 30 103-43.

Kadushin, A (1970) Adopting Older Children. Columbia University Press, New York.

Kagan, J (1984) The Nature of the Child. Basic Books, New York.

Kagan, J, Kearsley, RB, and Zelazo, PR (1978) Infancy: Its Place in Human Development. Harvard University Press: Cambridge.

Klackenberg, G (1956) Studies in Maternal Deprivation in Infants Homes. Acta Paediatrica, 45, 1-12.

LaFreniere, PJ, and Sroufe, LA (1985) Profiles of Peer Competence in the Preschool: Interrelations between measures, influence of social ecology, and relation to attachment history. Developmental Psychology 21, 1, p56-69.

Lambert, L (1981) Adopted from care by the age of seven. Adoption and Fostering, 105, 3, p.28-36.

Lambert, L, and Streather, J (1980) Children in Changing Families. London, National Children's Bureau.

Lebovici, S (1962) The concept of maternal deprivation: A review of research. In Deprivation of Maternal Care: A reassessment of its effects. W.H.O. Public Health Papers no.14, W.H.O., Geneva.

Levy, D (1937) Primary Affect Hunger. American Journal of Psychiatry, 94, 643-52.

Lewis, M, and Rosenblum, LA, (1974) The Effect of the Infant on its Caregiver. Wiley, New York.

Lindsay, WR, and Lindsay, IS (1982) A self-report questionnaire about social difficulty for adolescents. Journal of Adolescence, 5, 1, p63-69.

Longstreth, LE (1981) Revisiting Skeels' final study: A critique. Developmental Psychology 17, 5, p.620-625.

Lowrey, LG (1940) Personality Distortion and Early Institutional Care. American Journal of Orthopsychiatry, 10, 1, 576-585.

MacDonald, K (1985) Early Experience, Relative Plasticity, and Social Development. Developmental Review, 5, 99-121.

McClure, RK (1981) Coram's Children: The London Foundling Hospital in the Eighteenth Century. Yale University Press: New Haven and London.

McGraw, MB (1933) The effect of practice during infancy upon the developmKent of specific behaviour traits. Psychological Bulletin, 30, 9, p681-682.

Mackie, AJ (1982) Families of Adopted Adolescents. Journal of Adolescence, 5, 2, p167-178.

McNemar, Q (1940) A Critical Examination of the University of Iowa studies of environmental influences upon the IQ. Psychological Bulletin 37, 2, 63-92.

Mahler, MS, and McDevitt, J (1980) The separation-individuation process and identity formation. In SI Greenspan and GH Pollock (eds), The Course of Life, vol.1, Infancy and Early Childhood, publication no.(ADM) 80-786, DHHS, Washington DC, p.395-406.

Main, M, Kaplan, N, and Cassidy, J (1985) Security in infancy, childhood and adulthood: a move to the level of representation. In I. Bretherton and E Waters (eds), Growing Points in Attachment, Monographs of the Society for Research in Child Development, 50, (1-2), 66-106.

Matas, L, Arend, RA, and Sroufe, LA. (1978) Continuity of adaptation in the second year; the relationship between quality of attachment and later competence. Child Development 49, p 547-556.

Maughan, B, and Pickles, A (1990) Adopted and illegitimate children growing up. In LN Robins and M Rutter (eds)

Straight and devious pathways from childhood to adulthood.
Cambridge University Press.

Monck, E (1991) Patterns of confiding relationships among adolescent girls. Journal of Child Psychology and Psychiatry, 32, 2, p.333-345.

Newson, J, and Newson, E (1974) Cultural aspects of childrearing in the English-speaking world. In MPM Richards, (ed), The integration of the child into a social world. Cambridge University Press.

O'Connor, N (1956) The evidence for the permanently disturbing effects of mother child separation. Acta Psychologica, 12, 174-190.

Orlansky, H (1949) Infant care and personality. Psychological Bulletin, 46, 1, p1-48.

Oxley, GW (1974) Poor Relief in England and Wales, 1601-1834. David and Charles, Newton Abbot.

Passow, AH and Elliott DL (1970) The Disadvantaged in Depressed Areas. In Passow, AH, (ed) Deprivation and Disadvantage: Nature and Manifestations. International Studies in Education 21, Unesco Institute for Education, Hamburg. 52-69.

Pease, D, and Gardner, DB, (1958) Research on the Effects of Non-Continuous Mothering. Child Development, 29, 1, 141-148.

Pilling, D, and Pringle, MK (1978) Controversial Issues in Child Development. Paul Elek, London.

Pinchbeck, I, and Hewitt, M (1969) Children in English Society. 1: From Tudor times to the Eighteenth Century. Routledge and Kegan Paul, London.

Pinchbeck, I, and Hewitt, M (1973) Children in English Society. 2:From the Eighteenth Century to the Children Act 1948. Routledge and Kegan Paul, London.

Pines, M (1966) Revolution in Learning: The Years from Birth to Six. Harper and Row, New York.

Pinneau, SR (1950) A Critique on the articles by Margaret Ribble. Child Development, 21, 4, 203-228.

Pinneau, SR (1955) The infantile disorders of hospitalism and anaclitic depression. Psychological Bulletin, 52, 5, p.429-452.

Pringle, MK, and Bossio, V (1960) Early, prolonged separation and emotional maladjustment. Journal of Child Psychology and Psychiatry, 1, p.37-48

Quinton, D, and Rutter, M (1988) Parental Breakdown: the making and breaking of intergenerational links. Gower: Aldershot.

Rathbun, C, Di Virgilio, L, and Waldfogel, S (1958) The restitutive process in children following radical separation from family and culture. American Journal of Orthopsychiatry, 28, p.408-15.

Rathbun,C, McLaughlin, H, Bennet, C and Garland, JA (1965) Later adjustment of children following radical separation from family and culture. American Journal of Orthopsychiatry, 35, p.604-9.

Raynor, L (1981) The adopted child comes of age. Allen and Unwin, London.

Rheingold, HL (1956) The Modification of Social Responsiveness in Institutional Babies. Monographs of the Society for Research in Child Development, 21, no.2.

Rheingold, HL, and Bayley (1959) The later effects of an experimental modification of mothering. Child Development, 30, p363-372.

Ribble, MA (1944) Infantile experience in relation to personality development. In; Hunt, J McV (ed.) Personality and the Behaviour Disorders, II , Ronald Press, New York.

Ripin, R (1933) A comparative study of the development of infants in an institution with those in homes of low socio-economic status. Psychological Bulletin ,30, 9, 680-681.

Rodgers, B (1949) Cloak of Charity: studies in eighteenth century philanthropy. Methuen and Co., London.

Rutter, M (1981) Maternal Deprivation Reassessed. (2nd edition). Penguin Books, Harmondsworth.

Rutter, M (1989) Pathways from Childhood to Adult Life. Journal of Child Psychology and Psychiatry, 30, 1, 23-51.

Rutter, M (1985) Psychopathology and Development: Links between Childhood and Adult Life. In M Rutter and L Hersov, (eds) Child and Adolescent Psychiatry: Modern Approaches. (2nd edition) Blackwell, Oxford. 720-739.

Rutter, M, and Quinton, D (1984) Longterm follow-up of women institutionalised in childhood: factors promoting good functioning in later life. British Journal of Developmental Psychology, 2, p191-204.

Rutter, M, Tizard, J, and Whitmore (1970) (eds) Education, Health and Behaviour. Longman, London.

Rutter, M, Tizard, J, Yule, W, Graham, P, and Whitmore, K (1976) Isle of Wight Studies 1964-1974. Psychological Medicine, 6, p.313-32.

Saltz, R (1973) Effects of part-time "mothering" on IQ and SQ of young institutionalised children. Child Development, 44, 1, 166-170.

Sameroff, AJ (1975) Early Influences: Fact or Fancy? Merrill-Palmer Quarterly, 20, p275-301.

Sameroff, AJ, and Chandler, MJ (1975) Reproductive Risk and the continuum of caretaking casualty. In: FD Horowitz, M Hetherington, S Scarr-Salapatek and G. Siegel, (eds.) Review of Child Development Research, Vol 4. University of Chicago Press, Chicago.

Sayegh, Y, and Dennis, W (1965) The effect of supplementary experiences upon the behavioural development of infants in institutions. Child Development, 36, p.81-40.

Schechter, MD (1960) Observations on Adopted Children. Archives of General Psychiatry, 3, p.21-32.

Sears, RR (1947) Child Psychology. In W Dennis (ed) Current Trends in Psychology. University of Pittsburg Press, Pittsburgh. 50-74.

Shorter, E (1975) The Making of the Modern Family. Basic Books, New York.

Skeels, HM (1936) Mental Development of Children in Foster Homes. Journal of Genetic Psychology, 49, 91-106.

Skeels, HM (1938) Mental Development of Children in Foster Homes. Journal of Consulting Psychology, 2, 33-43.

Skeels, HM (1942) A study of the effects of differential stimulation on mentally retarded children; a follow-up report. American Journal of Mental Deficiency, 46, 340-350.

Skeels, HM (1966) Adult status of children with contrasting early life experiences. Monographs of the Society for Research in Child Development, 31, 1-56.

Skeels, HM, and Dye, H (1939) A study of the effects of differential stimulation on mentally retarded children. Proceedings of the American Association for Mental Deficiency, 44, 114-136.

Skeels, HM, and Harms, I (1948) Children with inferior social histories; their mental development in adoptive homes. Journal of Genetic Psychology, 72, 283-294.

Skeels, HM, Updegraff, R, Wellman, BL, and Williams, HM (1938) A Study of environmental stimulation: an orphanage preschool project. University of Iowa Studies in Child Welfare, 15, 4.

Skodak, M, and Skeels, HM (1945) A follow-up study of children in adoptive homes. Journal of Genetic Psychology, 66, 21-58.

Skuse, D (1984a) Extreme deprivation in early childhood. 1; Diverse outcomes for three siblings from an extraordinary family. Journal of Child Psychology and Psychiatry, 25, 4, 523-542.

Skuse, D (1984b) Extreme Deprivation in Early Childhood. 2; Theoretical issues and a comparative review. Journal of Child Psychology and Psychiatry, 25, 4, 543-572.

Spitz, RA(1945) Hospitalism: an enquiry into the genesis of psychiatric conditions in early childhood. The Psychoanalytic Study of the Child, 1, 53-74.

Spitz, RA (1946a) Hospitalism: a follow-up report. The Psychoanalytic Study of the Child, 2, 113-117.

Spitz,RA (1946b) with KM Wolf. Anaclitic Depression. An enquiry into the genesis of psychiatric conditions in early childhood. The Psychoanalytic Study of the Child ,2, 313-342.

Spitz, RA (1955) Reply to Dr. Pinneau. Psychological Bulletin, 54, 453-462.

Sroufe, LA (1977) Early Experience: Evidence and Myth. Contemporary Psychology, 22, 12, 878-880.

Sroufe, LA (1979) The Coherence of Individual Development; Early Care, Attachment, and subsequent developmental issues. American Psychologist, 34, 10, p 878-880.

Sroufe, LA (1986) Bowlby's contribution to psychoanalytic theory and developmental psychopathology. Journal of Child Psychology and Psychiatry, 27, p 841-849

Sroufe, LA (1988) The role of infant-caregiver attachment in development. In J Belsky and T Nezworski (eds), Clinical Implications of Attachment, Lawrence Erlbaum Associates, Hillsdale, New Jersey.

Sroufe, LA, Fox, NE, and Pancake, VR (1983) Attachment and Dependency in Developmental Perspective. Child Development 54, 1615-1617.

Sroufe, LA and Rutter M, (1984) The Domain of Developmental Psychopathology. Child Development, 55, 17-29.

Sroufe, LA, and Waters, E (1977) Attachment as an organisational construct. Child Development, 48, 1184-1199.

Stern, DN (1985) The Interpersonal World of the Infant. Basic Books: New York.

Stone, L (1977) The family, sex and marriage in England 1500-1800. Weidenfeld and Nicolson, London.

Stone, LJ (1954) A critique of studies of infant isolation. Child Development, 25, 1, p.9-20.

Tizard, B (1977) Adoption: A Second Chance. Open Books, London

Tizard, B (1979) Early Experience and Later Social Behaviour. In; D Shaffer and J Dunn, (eds) The First Year of Life: Psychological and Medical Implications of Early Experience. John Wiley and Sons, Chichester.

Tizard, B (1986) The care of Young Children; Implications of Recent Research. Thomas Coram Research Unit Working Paper no.1, London.

Tizard, B, Cooperman, O, Joseph, A, and Tizard, J (1972) Environmental effects on language development: a study of young children in long-stay residential nurseries. Child Development, 43 p.337-358.

Tizard, B. and Hodges, J. (1978) The effect of early institutional rearing on the development of eight year old children. Journal of Child Psychology and Psychiatry, 19, p.99-118.

Tizard, B, and Hughes, M (1984) Young Children Learning. Fontana; London.

Tizard, B, and Joseph, A (1970) The cognitive development of young children in residential care. Journal of Child Psychology and Psychiatry, 11, p.177-186.

Tizard, B, and Rees, J (1974) A comparison of the effects of adoption, restoration to the natural mother, and continued institutionalisation on the cognitive development of four-year-old children. Child Development, 45 p.92-99.

Tizard, B, and Rees, J (1975) The effect of early institutional rearing on the behaviour problems and affectional relationships of four-year-old children. Journal of Child Psychology and Psychiatry, 16, p.61-73.

Tizard, J, and Tizard, B (1971) Social development of two-year-old children in residential nurseries. In Schaffer, HR (ed) The Origins of Human Social Relations, Academic Press, London, p.147-163.

Trasler, G (1957) The effects of institutional care upon emotional development. Case Conference 41 p 35-40.

Tyson, P, and Tyson, RL (1990) Psychoanalytic Theories of Development: An Integration. Yale University Press, New Haven and London.

Wachs, TP, and Gruen, GG (1982) Early Experience and Human Development. Plenum, New York.

Wechsler, D (1955) Wechsler Adult Intelligence Scale. The Psychological Corporation, New York.

Wellman, B, Skeels, HM, and Skodak, M (1940) Review of McNemar's critical evaluation of Iowa Studies. Psychological Bulletin, 37, 93-111.

White, BL, and Held, R (1966) Plasticity of Sensorimotor Development in the Human Infant". In J. Rosenblith and W Allinsmith (eds.) The Causes of Behaviour. Readings in Child Development and Educational Psychology. Allyn and Bacon, Boston.

Wolkind, SN (1974) The components of "affectionless psychopathy" in institutionalised children. Journal of Child Psychology and Psychiatry, 15, p.215-220.

Wolkind, SN, and Rutter, M (1973) Children who have been "in care" - an epidemiological study. Journal of Child Psychology and Psychiatry, 14, 97-105.

Woodhead, M (1985) Preschool Education has Long-term Effects: but can they be generalised? Oxford Review of Education, 11, 2, p133-155.

Yarrow, LJ (1961) Maternal Deprivation: Toward an Empirical and Conceptual Re-Evaluation. Psychological Bulletin, 58, 6, 459-490.

Yarrow, LJ, Goodwin, MS, Manheimer, H, and Milowe, ID (1974) Infancy experiences and cognitive and personality development at ten years. In LJ Stone, HT Smith, and L Murphy, (eds.) The Competent Infant. Tavistock, London.

Yarrow, LJ, Rubenstein, JL, Pedersen, FA, and Jankowski, JJ (1972) Dimensions of early stimulation and their differential effects on infant development. Merrill-Palmer Quarterly 18, 3, p 205-218.

Yule, W, and Raynes, NV (1972) Behavioural characteristics of children in care in relation to indices of separation. Journal of Child Psychology and Psychiatry, 13, p 249-258.