Social and Psychological Factors in the Aetiology and Management of Children who Fail to Thrive.

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For my children,
Zygmunt and Andrzej,
whom I love.
## SECTION 1

### Chapter 1

Failure-to-thrive 12  
Socio and Psychogenesis 15  
Maternal Pathology & Growth Failure 18  
The Transactional Perspective 28  
Mother-Child Interactions (including feeding) 30  
Causal Mechanisms 38  
Behavioural Disorders in Failure to-thrive children 41  
Eating and Feeding Dysfunctions 45  
Summary 48

### Chapter 2

Failure-to-thrive and Child Abuse 51  
Bonding and Attachment 55  
Empirical Studies of Bonding 61  
Bonding and Child Maltreatment 65  
Studies of Child-to-Mother Attachment in Abnormal Infant Population 69  
Summary 73

### Chapter 3

Disorders of Eating and Feeding in Childhood 75  
Anorexia Nervosa - Bulimia 78  
Temperamental and Biological Adaptability 85  
Summary

### Chapter 4

Oppositional Behaviour (Non-Compliance) in Childhood 86  
Association Between Temperament and Behavioural Disorders 91  
Temperament and Mother-Child Interactions 97  
Temperament and Failure-to-Thrive 105  
Summary 107
SECTION III

An Experimental and Action Research Investigation of the Problem Failure-to-Thrive.

Chapter 8A

Organisation of the Investigation Group Assessments and Comparisons 169
The Investigation, Subjects, Index Group. 170
Control Group A, Control Group B. 171
Personality Tests 174
Structural Interviews 180
Items and Coding of Demographic and Child Development Data 182
Child Rearing Attitudes and Attachment 188
Observation 198
Evaluation of Behavioural Casework Intervention 199

Chapter 8B

Organisation of the Investigation and Casework Assessments and Intervention 200
Organismic Factors 201
Identification of the conditions controlling the Problem Behaviour 204
Description of a 'typical' Intervention 218
Post Intervention 223

SECTION IV

Results 224
Comparison of Groups, Demographic Results 225
The Home and the Family 231
Personality Factors 234
Attachment 245
Separation Experiences 256
Father-Child Interaction 258
Feeding 260
Child Rearing 264
The Child 281

Chapter 10

The Intervention, Treatment Results 293
Individual Case Evaluations (Seventeen Cases) 304
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INTRODUCTION

RATIONALE FOR THE STUDY

It was suggested as early as the 17th century that the secretion of the digestive juices might be induced by pleasurable emotions, and inhibited by unpleasant ones. Most people would agree from their own experience with Dr. Harrington's observations and, indeed, with his recommendations:

'Use three physicians still, First Doctor Quiet, Next Doctor Merryman and Doctor Diet'

(Harrington 1608)

Those who work closely with children who fail-to-thrive (and their families) will find this quotation very poignant. It indicates a long process of therapeutic struggle in order to bring those 'three wise men' into the lives of what is often a grief-stricken malnourished child and a desperate and demoralised parent.

I shall attempt in this thesis to illustrate my efforts to bring about calm, contentment and orderly patterns of feeding in situations which are fraught, unhappy and antipathetic to nutrition and growth. I hope to illustrate with case-histories and interview data the events and circumstances leading to distortions of
mother-child relationships which often result in poor child
growth and development.

Failure-to-thrive has of course many organic causes, whose
diagnosis and treatment fall into day to day work of
paediatricians. However, an increasing number of children
are being recognised to have no such organic cause for
failure-to-thrive. They pose a difficult problem. There
are theoretical contradictions, aetiological assumptions
and confusions; thus the therapist of whatever persuasion
- finds an uncharted 'minefield' ahead of him or her when
it comes to prescription, and this in what is often a
life-or-death disorder.

Failure-to-thrive is often associated aetiologically with
maternal deprivation, i.e., as a consequence of rejection
and/or neglect. This concept of maternal deprivation is a
complex one, but at its most simple, the child can be
thought of as being physically with the mother, but
emotionally distanced from her; it is as if he does not
belong to her. The following passage describes one
failure-to-thrive child's dilemma:

On the edge of the room stands Wayne, posture rigid,
staring fixedly at us. He is a sad lethargic looking
child, very small and extremely thin. His pale face
throws into relief the dark shadows under his eyes.
He remains in one spot, as if at attention. By now
he is gazing unswervingly at his mother. She takes
no notice of him. When asked to call Wayne over to
her, she looks in his direction; as she does so her face hardens and her eyes are angry. She addresses him with a dry command. When he hesitates she shouts at him. (Herbert, M & Iwaniec D.1979).

The author's observations of the mother and child interactions revealed that the mother never smiled at Wayne, never picked him up, never sat him on her knee, never played with or read to him. As the authors put it 'the only physical contact came about when she fed, bathed or dressed him, and at such times her handling was rough and silent. When she approached him he appeared to be frightened and occasionally burst into tears. He would never come to her for comfort or help, and she never approached him, except to carry out the bare essentials of care and control'.

It is now widely accepted that a baby needs a close, confident and caring physical and emotional contact with the mother (or mother surrogate; in order to grow well, be healthy and develop vigorously. The absence of such continuing nurturance and physical intimacy can bring about anxiety in the child, fretting and disruption of biological functions. In fairly recent years it has been observed and recognised that infants deprived of their accustomed parental care (e.g. body contact) may develop a profound depression (sometimes referred to as 'anaclitic depression') with consequent lack of appetite, wasting and even marasmus, leading to death.
Montagu (1978) in the chapter 'Tender Loving Care' after describing the high mortality rates (marasmus) in institutions, relates an interesting anecdote, in one of the German hospitals, before World War I. A distinguished American doctor (on a visit to Germany), whilst being shown over the wards in one of the hospitals, noticed an ancient hag-like woman, who was carrying a very measly baby on her hip. He curiously asked the Director; "Who is she?" "Oh, that" replied the Director "is old Anna, when we have done everything we can medically for a baby, and it is still not doing well, we turn it over to old Anna and she is always successful".

Old Anna rocked, held, carried the baby and talked to it. She gave the child caring and tender attention plus the close physical contact which every baby needs. It is small wonder that the babies passed to her — near death’s door despite all the physical treatment then available to doctors — did better with her unsophisticated but nurturant tender care.
Researchers such as R.A. Spitz were to explore these phenomena and concepts like 'anaclitic depression' or 'hospitalism' in the 1940's, John Bowlby (notably) the notion of 'maternal deprivation' in the 1950's. After the inevitable 'overstating of the case' which goes with theory-building, maternal deprivation (when specified and operationalised) has proved to be an extraordinarily useful explanatory and heuristic concept. It finds its place at the centre of this investigation.

I became interested in failure-to-thrive children, and also concerned, when I started to work as a paediatric social worker at the Department of Child Health - Leicester Royal Infirmary in 1976.

During the routine ward rounds and out-patients clinic sessions, also from visits, I was very often confronted with this baffling problem. My discussions with the paediatricians and the nursing staff indicated their feelings of uncertainty and frustration - their impotence to help many of the cases in which no organic cause could be detected. The frequent re-admission of non-organic failure-to-thrive children to the hospital, because of growth and weight failure at home (despite improvement during a previous hospital sojourn) was extremely worrying, time consuming and unproductive. This pattern of failure-to-thrive improving in the hospital and deteriorating soon after going home is the common feature of the disorder; the exclusion of an organic basis in
failure-to-thrive cases does not bring in its wake the expected relief; it is worrying to both the parents and the physicians. Negative test results cannot completely eliminate the possibility of some undetected serious abnormality. Or indeed, the alternative — that there is really no organic cause — is a very unpleasant, unacceptable inference. Parents will have increased feelings of guilt about their own contribution to the poor thriving of their infants and further feelings of helplessness.

Since non-organic failure-to-thrive is increasingly considered to be a 'social illness' I was asked and encouraged by the Consultants and Professor McNeish (with whom I worked at the time) to look specifically at this group of clients, in order to establish a better understanding, but above all to develop a service (in the therapeutic sense) for these children and parents.

Having been trained in behavioural casework (sometimes also referred to as behavioural psychotherapy) at the Child Treatment Research Unit — University of Leicester, under the supervision of Professor Martin Herbert, and since I had done a substantial amount of work with difficult children and their families, I felt that it would be a worthwhile (if daunting) task to apply behavioural casework methods in the assessment and treatment of failure-to-thrive children and their families. The method is very much rooted in a systems approach to problems.
It was obvious from the outset, that it would be necessary to devise new methods to obtain the relevant data and to modify the existing techniques of intervention. The first few cases that I dealt with using a behavioural approach proved so successful, that I was encouraged to test the suitability and efficacy of the method on a larger scale, I owe a great deal to the doctors and nursing staff who put so much faith in me and my profession, in their handing over (after painstaking physical screening) the main responsibility for the care of such serious problems.

My early contacts and observations of failure-to-thrive children and their families, together with discussions on the subject with medical staff and social workers raised many questions in my mind. Why, as a rule, did only one child in the family fail to thrive? Is he or she most likely to be the first born where the child rearing experience is lacking, or perhaps the child (for a young parent) was unwanted?. Why were the few mothers I had seen, apparently successful with, and relating well to their other children?. Is there something specific about the particular child who is subject to the disorder?. Why is he so vulnerable?. Did he arrive at a difficult time for the mother and the family?. Are the mothers (if one looks at a larger sample) unstable and disturbed, or do they lack mothering skills?. What kind of help and support do they get from their husbands, families and indeed from medical and social agencies - when they need it?. I wanted to explore this topic looking at it from
the social worker's point of view, the professional helper whose responsibilities are not only to protect the child, but also to prevent the need for that protection. If that protection is necessary then what kind of help would be most productive, or what action should be taken to reduce the growing number of 'social casualties' of this kind ?.
SECTION I

THE PROBLEM
CHAPTER I

FAILURE - TO - THRIVE

INTRODUCTION

Failure-to-thrive is described in the literature as a failure to grow and develop healthily and vigorously. The phrase was used as early as 1899 in the first edition of Diseases of Infancy and Childhood by Holt, to describe a baby who failed to grow after weaning from the breast. The term has changed meaning over the intervening 80 years. Until the first part of the 20th Century the condition of a wasted body was called marasmus and was always associated with some known or unknown physical disease. Only a few decades ago, when growth began to be studied scientifically, was it realised that failure-to-thrive is not a clearcut disease but a symptom (or more accurately a syndrome) which may have many causes. The aetiological factors are complex and varied; they include inadequate nutrition, malabsorption, chronic infection, major structural congenital abnormalities, metabolic and endocrine defects etc. However, there are some infants and young children who fail to thrive, in whom none of the above factors is obvious and whose present management and well-being is problematic.
The term failure-to-thrive has been applied to many conditions of differing aetiologies; the dichotomy between causes due to organic illness and those due (allegedly) to failure of the environment to provide appropriate nurturing—i.e. psychosocial causes— is the most significant division. It will be indicated in this thesis by use of the term failure-to-thrive and non-organic failure-to-thrive. Further complexity is introduced by the fact that organic and non-organic factors may combine to produce failure-to-thrive more commonly than previously thought. This is seen particularly when the treatment of an apparently clear-cut organic condition does not produce the expected improvement. Emotional overlays and/or secondary gains are known to complicate so-called psychosomatic disorders, not least those which have a clearly organic basis.

The term failure-to-thrive is not generally used (although often applicable) in speaking of a large population of children world-wide, who suffer from malnutrition as a result of the shortage of suitable food for themselves or their breast feeding mothers. Where there is total food deficiency resulting in the stunting of growth we shall refer to it as marasmus. Suskind (1977) estimated that there were some 100 million children under five years of age who were severely or moderately malnourished throughout the world—most of them in under-developed countries where famine, war and widespread poverty make food scarce. Yet we know that in Britain and other Western countries many
children suffer from malnutrition, which often is undetected because of inadequate medical and social work attention in the early years, or failure to diagnose it in children with other presenting illness or problems.

Failure-to-thrive as a diagnosis becomes significant in the society which can presume food will be available to all its children and where knowledge of paediatric disease and normal growth and development have become sufficiently precise to define the reasons for growth failure. The distinction between failure-to-thrive and non-organic failure-to-thrive became more apparent after the introduction of maternal deprivation theory over three decades ago, which shed new light on the failure of some children to grow and develop according to norms, despite the absence of 'disease' (Bowlby, 1958).

The failure-to-thrive concept which is mainly used in paediatric settings has become a popular term to describe infants and children whose growth and development are significantly below expected standards. It is thought of as a somewhat variable 'syndrome' of severe growth retardation, delayed skeletal maturation and retarded psychomotor development which is frequently associated with specific disturbances of (mainly) maternal behaviour and family disorganisation.

Non-organic failure-to-thrive over the last three decades has acquired various labels such as environmental
failure-to-thrive (Barbero and Shankin, 1967); deprivation dwarfism (Silver and Finkelstein 1967); maternal deprivation syndrome (Patton and Gardner, 1962); masked deprivation (Prugh and Harlow, 1962); environmental retardation (Coleman and Provence 1957); psychological dwarfism (Wolff and Money, 1973). These reports share a general attempt to provide psychological and social explanations for the causation of the postulated 'non-organic' failure-to-thrive syndrome. However there is little agreement on the precise nature of the psychological problems which result in, or contribute to, the clinical manifestation of the disorder.

Socio-and Psychoogenesis

The hypothesis of a psychological aetiology for the non-organic failure-to-thrive syndrome has its roots in the extensive literature on the effects of institutionalisation, hospitalism and maternal deprivation in infants. Some of the best documentation of the failure-to-thrive syndrome where those of Spitz (1945) and Widdowson (1951), The disorder of 'hospitalism' as Spitz termed it, occurred in institutionalised children in the first year of life, and the major manifestations involved emotional disturbance, failure to gain weight, and developmental retardation, resulting in poor developmental test performance. A
significant aetiological factor gleaned from Spitz’s study of infants cared for by their mothers whom Spitz compared with another group raised in virtual isolation from other infants and from adults, was the quantity and quality of maternal love and its continuity.

Spitz demonstrated that physical illnesses, including infections, are contracted more frequently by infants deprived of environmental stimulation and maternal care than those not so deprived. The failure-to-thrive syndrome according to Spitz is a direct result of inadequate nurturance. Indeed he actually documented long-term intellectual deficits in the survivors of the non-nurtured group. Thirty seven per cent of the deprived group had succumbed (died) by two years of age, compared with none in the adequately mothered control group. Spitz stated that a condition of anaclitic depression in the deprived infants manifested itself in decreased interest in environmental stimulation (including that from other humans); retardation of cognitive development, failure-to-thrive physically, insomnia and sadness. It should be noted that Spitz’s work has been severely criticised for methodological and other weaknesses. Nevertheless, it proved (with Bowlby’s work) to be significant in a heuristic sense, and has generated research and radical reform in child care.

Widdowson (1951) replicated Spitz findings that adequate caloric provision in an unfavourable psychological
environment due to harsh and unsympathetic handling, may not prevent seriously curtailed growth rate. Widdowson studied children in two German orphanages just after the war. A dietary supplement which was expected to produce faster weight gain was introduced in one orphanage (b) using the other (a) as a control. Contrary to expectations, it was the control group which gained weight and grew a little faster during the experimental period of six months. Afterwards it was discovered that the Matrons of the two orphanages had swapped over at about the time of the start of the dietary supplement. The Matron of (b) had been kindly, the Matron of (a) who now came to the experimental group was harsh and harassed the children at meal times. This could well have caused some achlorhydria and also anorexia, though it is hardly to be expected that the children would have been allowed to leave anything on their plate. One may speculate therefore that the dietary supplement was wasted. This study suggests that nutritional intake is not always a guide to growth performance and that non-nutritional 'emotional' factors may have an over-riding role.
MATERNAL PATHOLOGY AND GROWTH FAILURE

In the late fifties and sixties studies of growth failure and developmental delay, similar to those of institutional children, were replicated on infants and young children living at home. Studies of such children and their families have shown that the most commonly identified precursors to these growth problems are emotional disturbance and environmental deprivation - with the wide range of psycho-social disorganisation that these concepts imply. The deprivation often involves rejection, isolation from social contacts and neglect. These associations with poor growth have often been delineated in the context of maternal personality problems, stemming from the mother's own early background and family disfunctioning. Other psychological difficulties have been found in the manner in which the mothers nurture their small infants. Coleman and Provence (1957) presented detailed reports of two infants from middle class families in whom they postulated retardation of both growth and development resulting from insufficient stimulation from the mother and insufficient maternal care. In one case the child was difficult to feed from birth both on liquids and solids; the feeding situation was described as a persistent struggle. The child was otherwise quite unresponsive to any new stimuli and passive. Mother found him difficult to rear and enjoy. When the infant was seven months old the mother was three months pregnant and her father committed suicide. She showed for a prolonged period, grief, depression and anger. The second mother
was isolated and detached from her infant. She stopped breast feeding on the fourth day, because she was afraid she would smother it and spanked the infant because its crying drove her 'wild'. She alternated between feelings of depression and helplessness over the baby's developmental lag. This baby was not planned or wanted, because of the mother's career. The authors did not make any distinction between these two infants and mothers.

Case two seems to be one of rejection from birth while in Case one, the distortion in mother-child interactions may have resulted from the acute feeding problems and lack of responsiveness of the child to mother's attentions early on in life.

Fischoff et al (1971) conducted a psychiatric study of twelve mothers of three to twenty-four months old failure-to-thrive infants. The data-base was derived from two extensive psychiatric interviews supplemented by brief contact with mothers on the ward, a social work report, an unstructured interview with all the available fathers and observations of the paediatrician and nurses. They summarised the material for each mother, under the following headings: Age and marital status, initial appearance and manner, affect and mood, past history, past memories, self-image and ego functions, present mode of behaviour, object relationships, defences and fantasies, hopes and day dreams. They concluded that ten out of twelve mothers presented enough behavioural signs to
warrant a diagnosis of character disorder. These women, according to the authors presented a constellation of psychological features conducive to inadequate mothering e.g. limited ability to perceive and assess accurately the environment, their own needs or those of their children, limited ability to adapt to changes in the environment, adverse affective state, defective object relationships and limited capacity for concern. Since character disorders are (in the view of many) untreatable, they suggest that some of these failure-to-thrive children may be better off in foster homes. Although the vast majority of the mothers in their sample were found to present character disorder, whether or not it can be claimed to be a feature of depriving mothers in general is unknown; the sample was a small one. The term character disorder can also be a facile and meaningless designation - devoid of useful implications. Nevertheless similar, and other signs of psychopathology have been identified among mothers of failure-to-thrive children by other studies. Barbero et al (1963) state that mothers of infants who fail to thrive are in general depressed, angry, helpless and desperate and have problems in maintaining self-esteem. They state that 'In those instances where misidentification is part of a more pervasive and structured pathology, it becomes obvious to all concerned that these parents should be referred to the appropriate psychiatric and social agencies'. Barbero and Shankin (1967) postulate that depriving mothers have lived under significant environmental psychological disruption, such as alcoholism, childhood deprivation,
physical abuse between their parents and considerable strain in their own families.

Leonard et al, (1966) in their very comprehensive study describe some characteristics of thirteen mothers of infants who fail to thrive; tension, anger, anxiety and depression. (As always it is difficult to disentangle cause and effect.) Failure-to-thrive in an infant might well contribute to such states in the mothers. The mothers themselves had received poor mothering, were sexually traumatised as children or had experienced family instability. They found the mothers lacking in self-esteem unable to assess their babies' needs and their own worth realistically. They were lonely and isolated. The type of psychopathology described by these authors suggests severe disturbances in the character structure of many of the mothers.

Spinetta and Rigler (1972) hypothesise, on the basis of their studies, that the parents of failure-to-thrive children, like parents who physically abuse their children, have themselves been physically abused or neglected in childhood.

Bullard et al (1967) conclude from their study of fifty non-organic failure-to-thrive children that neglect, described by them as parental disinterest, is the major aetiological factor for the condition. Contributing to the neglect are factors in the parents' lives such as
instability of life-style, severe marital strife, erratic living habits, inability to maintain employment or provide the financial support for the care of the children. Alcoholism is often implicated as well as a history of entanglements with the law. The mothers tend to describe a lack of feeling for the child, and admit to leaving the child for long periods of time unattended or with strangers.

The authors question the appropriateness of using the blanket term 'maternal deprivation' when applied to failure-to-thrive children. They feel it should be used more specifically and should refer to possible inadequacies in feeding, holding and other particular care-taking activities of the mother.

The positioning of failure-to-thrive as secondary to maternal deprivation may rest on evidence that the infant had little physical handling by the mother or no appreciable social contact; such mothers are said rarely to hold, cuddle, smile at, play with or communicate with their children. The mothers may lack positive feelings for the child and be uncomfortable with him. She may also be insensitive to, and unable to assess the needs of the child particularly with regard to hunger. These aspects have been highlighted by several researchers including, Fischhoff et al. (1971), Leonard et al. (1966), Coleman and Provence (1957) and Bullard et al. (1967). In these studies feeding has been singled out as a time of major
conflict between mother and child.

There are striking similarities in the clinical observations of the personality and behavioural features of mothers of failure-to-thrive children. These observations however are somewhat questionable, lacking generalisability, because of the absence of contrast or control groups. Clinic-attending patients make for notoriously biased samples. A further weakness of much of the work is the absence of evidence on the reliability or validity of the procedures used for data collection. Far too many of the conclusions in the literature are based upon very small samples, retrospective data and clinical impressions. There are many examples in the literature and current social work/paediatric practice of parents (especially mothers) being labelled as having character disorder and of causing their infants' failure-to-thrive, with none of this labelling or causal inferencing being justified scientifically. Labelling prior to rigorous assessment and without adequate control procedures, may seriously confound the results and interpretations of most of the studies reviewed above.

One of the more convincing and comprehensive studies of the social development, emotional adaptation and functioning of mothers of failure-to-thrive children is that of Ernesto Pollitt et al. (1975). The objective of the study was to determine whether the mother of a failure-to-thrive child is likely to be psychologically ill-adapted, and whether
she creates adverse environmental conditions that interfere with the child's physical growth and psychological development. The content areas studied were:

1. Childhood environment of the mother.
2. Marital history of the mother.
3. Mental health of the mother.
5. Emotional and social relations of mother with child.

The total sample consisted of thirty-eight natural mothers of the thirty-eight children selected from the Outpatients Paediatric Clinic for a detailed study of the economic, social, family, nutritional and medical causes of failure-to-thrive.

The thirty-eight children were divided equally into an index and control group. Each pair was matched for age, sex and race. The criteria for admission into the study for index children were as follows:

1. Age 12 to 60 months.
2. Height and weight below the third percentile, for age.
3. Birth weight greater than 2500 grams.
4. Gestation period 36 weeks or more.
5. No evidence of birth complications.
6. No physical disability.
7. No evidence of brain damage.
10. Maternal height equal to or greater than five feet one
11. Mother able to communicate in English.

All criteria for controls were the same, except for anthropometry, which in their case required a height and weight at or above the 25th percentile of the same growth standards.

The methods used to collect the data were: open ended interviews, direct observations and various questionnaires. Maternal recollections of childhood, marital and psychiatric histories were obtained through informal open-ended interviews. A questionnaire (A Family Background Interview Schedule) was used to obtain information on the dates and timing of changes in marital status. Data on the mothers' emotional and social relationship with her child were obtained through direct observations during home visits or meetings with the mothers.

The open-ended interviews and direct observations were recorded in the form of narrative records, which were prepared by the interviewer after each home visit, and they included a detailed description of the behaviour of the mother and her children during the home visit.
The Mental Health Interview Schedule was used to evaluate current emotional status. This form was designed to record scaled judgements of a mother's functioning during a one week period. It included questions on areas directly relevant to their study, such as house-keeping, mate or parent and social isolation, they also included a scale on depression and anxiety.

The responses to the interview questions were scored on a five point scale; the high scores suggested psychopathology. The data on mother-child interaction was collected by using a shortened version of the Inventory of Home Stimulation and some items from the Child-Food Level of Living Scale. The check list included items in the categories of development and vocal stimulation emotional climate and reliable evidence of affection.

The checklist was used under two conditions. First the interviewers rated each mother after completing the family study. Second, the anthropologist read all the narrative records from the family studies and then rated each mother. The second rating was done without knowledge of the results of the first rating or the group to which the case belonged. The data collection for the whole study required on average, ten home visits and thirteen hours for the index group and eight home visits and twelve hours for the contrast group.
Results indicated that the maternal behaviour of the women of the failure-to-thrive group, did not show overt psychopathology, but differed substantially in some areas from that of the control group. The nature and pattern of stressful childhood experiences found among the index group suggests that these women had a higher chance of becoming ill-adapted during their childhood or later life. The marital history and mental health of the experimental group of mothers was not different from the controls at a statistically significant level.

The strongest between-group statistical differences were found in the scores on the mother-child interaction check-list. In comparison to the mothers of the index children the mothers in the control group had more frequent verbal and physical contacts, were more positively reinforcing and warm. These differences in verbal interactions were noted in the socialization tasks, such as those involving verbal interaction, punishments and rewards - which were more frequently observed in the control group. Substantial differences were also noted in maternal affection. They suggested that the maternal behaviour of these women might be described as inoperant because it differed markedly from that of the mothers of normally thriving children.

The authors concluded their findings by pointing out that despite stressful backgrounds most of the women in the index group were free of severe psychopathology. The
researchers did not find (as suggested by other studies mentioned above) the lack of control or abnormal social behaviour which might have suggested the presence of personality disturbance. They found the mothers cognitively alert and functioning well intellectually.

We have seen that parental neglect and rejection have been directly or indirectly identified as immediate causal antecedents of failure-to-thrive (Elmer, 1960; Leonard, 1966). These behaviours in turn are often related to an underlying character disorder, or other personality disturbances which are traced back to a stressful childhood. It is difficult to accept this 'logic' uncritically as mothers of failure-to-thrive children relate well to their other children in many instances (MacCarthy, 1978). Of course, family therapists might well point to the phenomenon of the 'scapegoated' child. Sadly, the literature is unhelpful when it comes to the more precise delineation of causal factors, be they family-orientated or individual psychodynamic events.

THE TRANSACTIONAL PERSPECTIVE

It would appear that there are many other factors (other than parental character disorder) in operation which might influence difficulties in relating positively to a particular child. Sameroff and Chandler (1975) have proposed a transactional model to explain developmental and behavioural disturbances among children, including those
with failure-to-thrive. This model focuses on the plasticity of the environment and the organism, and stresses that the interaction process is constantly changing and adapting to new situations. A failure in the synchrony of this relationship may be caused by factors in the environment, or in both. Therefore transactions between mother and child may fail because of interferences stemming from behaviour or characteristics of either or both members of the dyad. This is something largely ignored in the mainly medical literature on failure-to-thrive.

Attention has been drawn already to temperamental factors of the child, which might influence the mother-child interactions and relationships - with possible ramifications for failure-to-thrive aetiology (see Gil, 1970, Friedrich and Boriskin, 1976; Schaffer and Emerson, 1964; Leonard et al 1966).

The issue of temperament will be discussed fully in Chapters 3,4. However, it is certainly of relevance to our interest in failure-to-thrive, that Schaffer and Emerson (1964) isolated two groups of infants - those who actively resisted close physical contact under all conditions (non-cuddlers) and those who accepted close physical contact under all conditions (cuddlers). It was determined that this behaviour was not peculiar to the relationship of child with the mother. Schaffer and Emerson felt that a non-cuddling pattern is not of itself a 'bad sign'
clinically. Only if the mother is too rigid in attempting alternative methods of relating to the child, or if she feels the non-cuddling behaviour is a sign of rejection, may there be clinical implications.

Is there evidence of a pathological mother-child relationship in failure-to-thrive problems; and one involving tempermental peculiarities in the child? This raised one of the issues for investigation in the present study. Certainly, the most striking difference between the mothers in the index and contrast groups in the Pollitt et al. (1975)investigation lies in their interpersonal interactional behaviour with their children.

MOTHER-CHILD INTERACTIONS (INCLUDING FEEDING)

Tiffany Martin Field and her co-workers (1980) selected a form of child maltreatment (non-organic failure-to-thrive) to illustrate one application of the transactional model to the understanding of disturbances in mother-infant interaction. The purpose of their study was to determine more precisely the way in which specific maternal actions (or lack of actions) affect the child.

Contrary to all studies done previously, where diagnosis of non-organic failure-to-thrive was already established, they began their research during pregnancy. A prospective longitudinal design was used in which a group of 1400 women were interviewed during the first trimester of pregnancy
using an interview specifically developed to identify families most likely to contain an infant later identified as maltreated. About a third of these women and their infants were followed up until the infants were eighteen months of age. After the infants first two weeks of life sub-sample of these mother-infant dyads were diagnosed as having non-organic failure-to-thrive (the criteria were that they had to put on weight less than two ounces per day) and were compared with normally growing dyads.

The study was based on a comparison of mothers' own upbringing, personality, general attitudes, child rearing knowledge and knowledge of child development, the presence of environmental and life stress and general demographic characteristics. Infant developmental variables included infant birth-weight, Apgar score, history of pregnancy and delivery, also an assessment of baby motor and social maturity. The mother and child were observed together soon after birth to assess infant dyadic behaviour during early interaction. That enabled the researchers to examine the behaviour of interest prior to the occurrence of a problem. There were eighteen boys and seventeen girls in in the index group. The comparison sample consisted of twenty five males and twenty five females.

Their results showed no significant statistical differences between groups in all measured aspects apart from lower birth-weight and earlier birth in failure-to-thrive infants. There were no apparent behavioural consequences
of these differences manifesting themselves in the infant's behaviour.

In examining individual maternal behaviour, while the infants and mothers were together, one difference was found. The mothers in the growth-failure group tended to spend significantly less time looking at their babies than the control group. Since the mothers with growth failure infants did not differ along a number of dimensions from their peers with non-diagnosed infants, the authors suggested that perhaps the difference in birth conditions led to immediate consequences for the mother-infant interaction which set up a chain of events resulting in poorly growing infants. A small or early baby (in the context of environmental pressure, experienced by families in either group) could lead to greater difficulty for the mother in forming a sufficiently strong attachment to her infant so as to provide an adequate psychological basis for his/her healthy development.

Their findings were further supported by Pollitt et al. (1978). They tested the hypothesis that selected behaviours of both mothers and infant during feedings were predictors of weight gain during the first months of life. Forty normal mother-neonate pairs were observed during their first feeding interaction twenty to thirty six hours after birth. The behaviours of the mothers and the infants were recorded during the feeding using a video-camera. Two observers simultaneously coded the behaviours shown on the video-tapes of the mothers-infants feedings.
One monitored the mother's behaviour and the other monitored the infants. While viewing the video-tapes the observers verbally recorded the incidence of the coded behaviours onto audio-tape. Two hours of maternal behaviours were coded and sixteen of the infants' behaviours.

The results revealed that the mothers of heavy infants cleaned, inspected, spoke to and adjusted the blankets of their babies more often than the mothers of light infants. Conversely, the mothers of the small infants spent more time encouraging their babies to suck and stimulating them by bouncing or rocking them than the mothers of the large infants. The heavy infants themselves spent more time holding the nipple in their mouths, reaching towards their mothers and moving their arms and legs vigorously than did the light infants.

Three of the maternal behaviour variables correlated significantly with weight gain (p<0.05): the number of times the mother replaced the sanitary paper nipple cover on the baby's bottle was positively related, whereas both the frequency and duration of changing activity were negatively related to weight gain.

Concerning the behaviours of the infants: the number of times an infant opened his eyes correlated positively with weight gain, whereas the number of times he refused the nipple correlated negatively with this measure. A
significant effect of sex was found for two of the maternal variables and two of the infant variables. Mothers of infant girls stimulated their daughters to suck almost twice as often as mothers of boys. Conversely, mothers of boys spent significantly more time cleaning their infants than did mothers of girls. Female infants refused the nipple significantly more times than the male infants. Although the amount of weight gained was not significantly different, the males weighed significantly more both at birth and at one month of age than the females. All variables that correlated significantly with sex also correlated with birth weight.

This study indicated that there were marked and measurable differences in the ways mothers and their newborns behaved during their first feeding interactions. These differences moreover were related to birthweight and to growth velocity during the first month of life. Many studies have shown variations in the behaviours of mothers and infants, and a few have shown how these transactions relate to the infants later psychological development. The innovative aspect of the Pollitt study demonstrated that early transactional relationships are related to the child’s later physical development. Their findings indicated that intake partly depends on environmental circumstances that became influential at the beginning of postnatal life and contributed to the regulation of the organism’s growth velocity. Furthermore, they highlight the child’s temperamental characteristics, emphasizing that the infant
is not a passive recipient, but an active organism whose behaviour controls the volume of intake.

The importance of their findings is the implication for possible preventative work. For instance, a significant negative relationship exists between the number of times the infant refused the nipple and weight gain. Early identification of infants who have poor sucking ability may allow the introduction of corrective measures for the feeding style etc. Furthermore, as this study showed, the problem of an infant with poor sucking ability might be compounded if his mother was impatient when feeding her difficult child. Instructions for mothers to make them more aware of their children's needs, should facilitate synchronisation of these needs with their own. Synchronisation should make feeding easier and improve the overall relationship between mother and infant. The early identification of vulnerable children might allow the problem to be dealt with before the child's growth is truly worrying; help being provided by health visitors and/or social workers.

Leiderman et al. (1973) in a similar study tested the hypothesis that early physical contact between mothers and premature infants enhanced the children's physical growth. These investigations studied two groups of infants with very low birth-weights. The infants were observed during the first week of life and one month after their discharge from the hospital. The babies in one group had early and
frequent contact with their mothers during the period of intensive hospital care. Those in the other group had no direct contact at this time. As expected, the babies in the group allowed physical contact with their mothers in the intensive care nursery gained more weight than the group denied contact. What is important to note is that they found no difference in the mother’s social attachment behaviour related to the differences in weight increase.

Again, a study by Chao (1971), in which mothers were taught how to respond appropriately to their newborns during feedings, showed that this response was instrumental in accelerating early weight gain. Compared with infants whose mothers received only standard hospital infant feeding interaction, infants whose mothers were given special instruction – including how to help the baby achieve correct sucking grasp and to select the proper nipple and how to recognise signs of satisfaction – had greater weight gain beginning on the fourth day and continuing throughout the ten day observation period.

A series of investigations by Thomas and colleagues (1970, 1971) suggested that experience increased skill in feeding. They postulated that primaparous mothers took longer to feed their infants, changed their feeding activity more often, and stimulated their infants more than did multiparous mothers. Yet the infants of primaparous mothers consumed less if they were bottle fed and sucked less if breast fed, than did the infants of multiparous
mothers. Their study implied that first-time mothers are more anxious to succeed and try various ways to feed the child, more often than mothers who brought up more than one child.

While it might apply to a general population of mother-infant pairs, it does not seem to apply to a majority of cases of failure-to-thrive children. Various studies, (Leonard et al. 1966, MacCarthy 1967) suggest that failure-to-thrive children are not always first born and therefore lack of experience in feeding is not the only factor causing poor weight gain.

Kempe et al. (1980) when reviewing the maternal attitude to feeding of failure-to-thrive children found that the children's reactions to food varied from voracious hunger to irritable or apathetic refusal. They recognised several components in the feeding histories of these children:

a) Inability to recognise, when the child is hungry.
b) Irregular feeding.
c) Over-feeding - which might cause digestive problems like vomiting, colic, diarrhoea.
d) Lack of experience and awareness how to proceed with feeding.
e) Inability to recognise that the child is growing poorly because of underfeeding.
f) Failure to take food, because of inappropriate holding, or wrong food (milk or solids) given.
g) Inability to tolerate messiness when child feeds
himself.

h) Lack of stimulation and interest in feeding the child.

While the above factors are strongly emphasised, they seemed to be perceived as 'one way traffic' - that the mother only is at fault. They have not adequately examined the eliciting role of the child in the process. The proactive behaviour as well as the way the child reacts to a mother's feeding style and various other caregiving activities is significant. And this is not to deny that the way the mother reacts and manages these feeding and caring tasks might be the most important factor in a particular case leading to interactional and relationship distortions over a period of time. There is no study available to date which examines failure-to-thrive children's temperamental characteristics in a detailed way. There is strong evidence available see (Bell, 1975, Thomas et al. 1968, Curry 1972, Graham et al. 1976, Herbert 1978) that temperamental characteristics in the child play a powerful role in the way he is looked after and managed. The intake of food and its absorption might also be determined by the neuroendocrine system regulating growth. This aspect will be briefly discussed in the next section.

CAUSAL MECHANISMS

The association between maternal deprivation (in particular) and failure-to-thrive has led some investigators to hypothesise the existence of a
physiological pathway whereby emotional deprivation affects the neuroendocrine system regulating growth. The mechanisms of the growth failure, in fact are not clear. It is suggested (Fischhoff et al. 1971) that maternally deprived infants can be under-weight because of under-eating (which is secondary to being offered inadequate food), or because of the refusal of the adequate nourishment offered - rather than as a result of some psychologically induced defect in absorption or metabolism.

A number of studies were done to test growth hormone efficiency. Its mechanism in dwarfism was studied extensively in attempts to answer the question, 'what factors play a role in hormone growth arrest?' And what happens and under what circumstances when they are "switched on" again? These studies concentrated on various forms of growth failure, but particularly on dwarfism without organic cause. Dwarf children are those below the third percentile for height. The weight is below that expected for the height, though exceptionally it is appropriate and the child appears well nourished. Patton and Gardner (1962) postulate that emotional disturbances might have direct effects on intermediary metabolism, so as to interfere with anabolic processes. The production and release of several anterior pituitary hormones, are influenced by hypothalmic centres, which are in turn recipients of pathways from higher neural centres, particularly the limbic cortex. The limbic cortex is also
thought to be the locus of emotional feeling and behaviour. These authors, on the basis of six very thoroughly studied children, favoured a theory of emotional influence on growth with secondary hormonal insufficiencies as the main cause of the dwarfism.

Apley et al. (1971) made penetrating enquiries based on paediatric, psychiatric and social team-work information to discover the truth about food intake of dwarfs in Bristol. Their exhaustive clinical, biochemical and endocrine tests on all the children satisfactorily ruled out the operation of pathological causes in the stunting of growth and by inference they point to underfeeding as the cause.

The work of Talbot et al. (1947) foreshadowed most of what is now known about these children. They were first to point to "chronic grief" as one of the causes of dwarfism. In studying over one hundred dwarfs of all kinds, in twenty-five boy and twenty-three girls aged two and a half years to fifteen years, they were not able to find an organic cause. Nutritional histories of these children, as they stated, indicated clearly that there were difficult feeding problems and had been so for the major part of their lives, in many cases since infancy. Talbot et al. postulated that the child having once become undersized continues with a basically reduced protein and caloric requirement and that pituitary function having become adaptively reduced he fails to respond to normal function when the diet improves. Some children therefore remain small though apparently well nourished.
Having treated them with pituitary hormones he found out that some of those children, both the well nourished and the thin ones, were capable of good growth over many months.

Lastly, they discovered by psychiatric and social studies that the background of these children could be grossly abnormal and listed the following features in twenty-four dwarfs: rejection, thirty-four percent, poverty, fourteen percent, mental deficiency, nineteen percent, "chronic grief" fourteen percent, maternal delinquency and breakdown, fourteen percent, no abnormality five percent. And in seven well nourished dwarfs, no abnormality was found in three, maternal delinquency or breakdown in three and rejection in one. Four of these children with disturbed maternal relationships were dwarfed but they nevertheless appeared well nourished. This strongly suggests that consumption of food in terms of calories was not the whole answer to the cause of the dwarfism and led other researchers to pursue the hormone study. The issue of hormones and their effect on growth arrest is still unclear.

**BEHAVIOURAL DISORDERS IN FAILURE-TO-THRIVE CHILDREN**

Despite a relatively large body of literature on failure-to-thrive children, little systematic research has been done regarding their behavioural disturbances. The only substantial study available which deals with
'temperamental' behavioural disturbances among failure-to-thrive children is by Pollitt et al. (1976) which will be described in detail later.

Most of the available investigations (and here they are similar to those dealing with maternal behaviour) have had at least three serious methodological problems that are readily identifiable: a) a lack of control or contrast groups, b) a relative absence or limited use of social and medical records (i.e. one or two interview sources for the data base) c) lack of specificity in the definition of the behaviours under study; and d) a heavy reliance on retrospective, subjective (impressionistic) information.

Most of the publications available on failure-to-thrive children are based on clinical observations. These investigations revealed various behavioural problems as well as retarded intellectual development and delayed or distorted, neurophysical development particularly in the areas of eating, sleeping and elimination (Evans et al. 1972, Glaser et al. 1969, Wolf et al. 1967, Leonard et al. 1966).

Some children were also observed to manifest autoerotic behaviour such as rocking, finger sucking, and also self-harming behaviour such as head-banging, self-biting, frequent falling and bumping into furniture (Whitten et al. 1969, Monet et al. 1972). Enuresis, encopresis and delayed toilet training were also observed (Silver et al. 1967,
Powell et al. (1967). Aggressiveness, temper tantrums, frustration, intolerance were noted by MacCarth (1968) and Leonard et al. (1966). Without contrast groups or epidemiological base rates it is difficult to know what to make of these co-existing problems.

Leonard et al. (ibid) reported that 3 out of 19 children in their study presented severe conduct problems like stubbornness and aggression. These children showed severe disturbances in interaction with their mothers, with frequent occurrences of fighting and displays of anger, especially at feeding times.

Deficit behaviours such as withdrawal, depression, apprehension, anxiety, lethargic movements, diminished vocalisation and speech have been recorded by many investigators.

However, the most striking behaviour problems in these children, observed and noted by all the available studies, are feeding and eating problems. Eating problems were reported to manifest themselves in food refusal and lack of hunger drive in most of these children. Strangely, it appears (personal communication from a paediatric consultant) that many paediatricians tend to underplay the specific importance of feeding difficulties, per se, in dealing with failure-to-thrive children. Some, however, showed quite bizarre ways of eating, such as ravenous appetites and gorging to the point of vomiting, scavenging
for food out of doors, eating household pet's food, grass
or scraps from dustbins, drinking from lavatories and
puddles, or gulping food whole, stealing, begging and hiding
food (MacCarthy 1978, Silver et al. 1967, Powell et al.

What is not clarified in the literature is the chicken-egg
problem—scarceiy surprising given mainly post-hoc
correlational studies. But the question remains: what is
cause and what is effect among all these complex
difficulties; if rejecting mothers (or fathers) starve
their children are they not likely to manifest a wide range
of behaviours indicative of acute frustration and emotional
disturbance? Might they not display episodes of bulimia
and pica because of their starved condition? Could the
behaviour problems be primary in some cases and the feeding
difficulties (like some cases of incontinence — see Herbert
1982) be part of a general oppositional syndrome? Sadly,
the threads are not disentangled in the research
literature. If the findings in other areas of
psychosomatic problems are to be believed (see Herbert
1974) causation is multifactorial, i.e. we may have a
rejecting and neglectful mother in one instance who
literally starves her child (a case of child abuse): we may
have another mother who figuratively 'starves' her child,
because she feeds it in a state of panic — a history of
organic problems surrounding the eating process has given
way to psychogenic phobic avoidance of food by the child;
the child might have learnt on an operant basis to behave
in a coercive and oppositional manner in order to get certain (and sometimes self-defeating) secondary gains. In yet another case an immature and ignorant mother may be feeding her child in a wholly inappropriate irregular and insufficient manner. Then again, there may be 'emotional starvation' (deprivation) which, in ways still mysterious is translated to the physical arena. One envisages a situation in which the child's loss of appetite and refusal of food is related to a depressed condition secondary to a variety of circumstances such as parental rejection, experiences of loss and separation, illness etc.

EATING AND FEEDING DYSFUNCTIONS

There is a vast amount of literature on dysfunctions of eating/feeding in adolescents ('anorexia nervosa') and in adults ('obesity') but a paucity of findings to guide us through the thicket of speculation about infant feeding disorders of a psychological kind. However, Pollitt and Eichler (1976) have studied the eating, sleeping, elimination, autoerotic and self harming behaviours of nineteen pre-school failure-to-thrive children; their behaviour was compared to a group of nineteen children growing normally for their chronological age. All children were attending the Out-Patients Paediatric Clinic, the selection criteria for the index children were as specified in the earlier study. The contrast children met all the same criteria except for the weight and height, which were required to be on or above the 25th percentile. Each contrast case was matched with an index one for age, sex
and race.

The relevant information on the children’s behaviour was obtained in two ways; 1) Interview data on the child’s feeding history and toilet training (as part of the medical history) and on dietary intake; the 24 hours recall method was used for dietary intake in most home visits, and the average intake from all recalls was the measure used for comparison; 2) Direct observation and open-ended interviews on the child’s eating habits, response to food and moods during eating, the quality of his sucking as an infant and the presence or absence of behaviour such as polydipsia, hiding food or eating non-food substances. Similarly information was collected on the child’s sleeping behaviour and its disturbances, also on autoerotic and self-harming behaviours.

The data from the direct observations and informal interviews were recorded in narrative form after each interview. The complete data collection took between seven to eleven weeks, each home visit lasting one and a half hours.

The findings relating to eating indicated difficulties in infant feeding including poor appetite, poor sucking, crying during feeding, vomiting after each feeding and refusal to switch from liquids to solids. In comparison with the contrast group more mothers of index children reported infant feeding difficulties (p<02). A significant
difference was found in the meal pattern and content of meals and their meals were more skimpy. The total caloric intake of the two groups was statistically different ($t = 1.82$, df = 13, $p = 0.05$) one tailed test. The index children showed a poorer response to food than their counterparts ($p < 0.02$).

Eating and drinking nonfood items, gorging and hiding food were observed in four index children. No such problems were found among the contrast group.

Findings relating to sleeping indicated that there were no significant differences in the sleeping schedules. Resistance to going to sleep was reported in only three index children and one contrast child. Also there were no noticeable differences in waking at night. Two index children and no contrast children showed pathological sleeping behaviour.

With regard to elimination functions there was delayed toilet training in two index children and one contrast group child and two index children presented typical elimination behaviours.
Autoerotic and self-harming behaviour was observed in only four index children, two children in each category. None of the contrast children were reported to have these problems.

**SUMMARY**

In summary, the most noticeable differences in behaviour between the two groups of children occurred in the area of eating. There was no statistical difference between the two groups in the incidence of problems when each of the other behavioural areas were examined separately (sleeping, elimination, autoerotic and self-harming). However, a significant statistical difference was found when the two groups of children were compared as to the number of children presenting one or more pathologic behaviours in any of the above behavioural problems. Ten index children exhibited a typical behaviour and one of the contrast group (p<01).

Pollitt and Eichler concluded their study by stating that there is some support for the view that the observed behavioural abnormalities among failure-to-thrive children might stem partly from conflicts in the interpersonal relationship with the child's primary caregiver. Their hypothesis, however, did not exclude the possibility that the alterations in behaviour might also be related to neurohormonal disturbances.

When looking at the Pollitt et al. results, the disturbed behavioural characteristics of the index group in eating, sleeping and elimination - which are usually regarded as aspects of temperamental type such as the 'difficult child' (see Chapter
lead one to speculate that some of these children might have been temperamentally 'difficult' or 'slow to warm up'. Such children require firm but patient handling, which is very often lacking, and the mother-child interaction can evolve into a recurrent confrontation and a bruising battle of wills.
TABLE 1.1. provides a summary picture of the main features of the non-organic failure-to-thrive syndrome:

**TABLE 1.1.**

**NON-ORGANIC FAILURE-TO-THRIVE**
- (emotional deprivation)
- (deprivation dwarfism)

**GROWTH RETARDATION**
- Child falls below the 3rd percentile in weight and height

**PHYSICAL DESCRIPTION**
- Wasted body, thin arms and legs. Large stomach.
- Red cold and wet hands and feet. Thin wispy dull and falling hair.
- Dark circles around the eyes.

**PHYSICAL SYMPTOMS**
- Refusal to take feeds.
- Vomiting.
- Diarrhoea.

**DEVELOPMENTAL RETARDATION**
- Motor
- Language
- Social
- Intellectual
- Elimination

**PSYCHOLOGICAL DESCRIPTION**
- Sadness
- Expressionless face.
- General lethargy.
- Withdrawal.
- Detachment.
- Depression.
- Bursting into tears.
- Frequently whining.
- Minimal or no smiling.
- Diminished vocalisation.
- Staring blankly at people or objects.
- Lack of cuddliness.
- Irresponsiveness.
- Lack of proper stranger anxiety.
The 1970 Report of the Joint Commission on Mental Health of Children brought to public attention a poorly researched problem of children's maltreatment which was thought to be the result of gross parental inattention to the needs of their offspring. This neglect was shown in the poor physical and emotional or social stimulation, minimal display of affection, lack of healthy regular care and unusual isolation of the child and the community.

Failure-to-thrive is seen by some writers as one aspect of child abuse - the result of prolonged parental, but especially maternal, neglect and emotional deprivation, which at times can lead to physical maltreatment (e.g. battering). There is no clear differentiation between neglected and abused children; in fact many children initially identified as victims of battering are later discovered to be seriously neglected as well (Gil 1979).

A number of studies (see: Elmer 1967, Birrell and Birrell 1968, Martin 1972, Smith and Hanson 1974,) have reported
poor physical growth and poor nutrition in approximately 25-30 percent of abused children, at the time of N.A.I. identification.

Koel (1969) reported three cases of infants, hospitalised because of failure-to-thrive who were later re-admitted as the result of subsequent violence and assault. These findings are consistent with other reports in the literature (Bullard et al. 1967; Gil 1970, Simons et al. 1966) which document cases of co-existing failure-to-thrive and traumatic assault. These studies suggested a number of interrelated maltreatment patterns including rejection, neglect, 'non-accidental' injury and abuse.

In contrast to battering, where the evidence for assault is relatively objective, the events surrounding periods of protracted neglect - sometimes a kind of emotional abuse - are much more difficult to specify. As Bullard et al. (1967) indicate, many distortions that result in failure-to-thrive might be themselves the result of excessive and ill-timed handling (rather than absence of care) and should not be referred to simplistically as neglect.

The neglect in failure-to-thrive children varies along a spectrum from the wilful and overtly rejective to the passive and unwitting type. Neglectful parenting may sometimes be attributable to lack of knowledge and lack of judgement. Parents may be unaware that an infant needs to
be fed every three or four hours; may not have the ability to cook a meal or indeed not even know what constitutes a nutritional meal. They might know nothing of normal developmental milestones and be unaware of children's needs for stimulation. They might not recognise the importance of emotional nurturing as a need of the child. Parental judgement might be at fault; the child might not be perceived to be ill, or that he is abnormally thin of that he cries because he is hungry or he fights and refuses feeding because he is not hungry.

This unawareness is potentially dangerous to the child's development and his general well being. However, we can't directly 'blame' the helpless mother for her ignorance. We can't blame her if she was not prepared for motherhood, had faulty role-models and then to exacerbate matters, received little help or attention when the baby was born. The educative role of the various helping agencies and authorities, as pointed out by Kempe (1980), still leaves a lot to be desired, even in the Welfare State.

While physical abuse, however infrequent, is easier to recognise (if severe) because of the distinct physical marks - neglect can go for a long time unnoticed, especially that of an emotional kind (see Herbert & Iwaniec 1979). The child might appear well dressed, clean, well provided for and even offered good food, but is still reared in an 'emotional vacuum'. He or she may seldom be spoken to, looked at, comforted, attended to when in difficulties,
never cuddled and played with. Any verbal or physical contact is harsh, commanding or indifferent. Good food is unlikely to have its full nutritional potential if gulped down in an atmosphere fraught with tension. It is a cliche that we need to be relaxed when we eat.

Such emotional emptiness and loneliness is a frequent feature in failure-to-thrive children. When children live in a hostile or indifferent atmosphere, their physical and psychological development is quite likely to be arrested (MacCarthy, 1968).

Prugh and Harlow (1962) describe thus the dilemma of failure-to-thrive children: the parents are physically present, but psychologically unavailable to them. This psychological unavailability is thought to affect the child's somatic growth.

The physical appearance of failure-to-thrive children and their expression is certainly quite striking. There is a general air of dejection and apathy, the skin is pale or mottled and tends to be cold. The hair is thin and sometimes falls out. The abdomen is sometimes enlarged, legs and arms, are strikingly thin. The hands and feet are 'pinkish-blue', often cold and damp, similar to that of anorexia nervosa or the state of starvation. When brought into a warm atmosphere in which the circulation improves, there may be an initial state of swelling and acute pain on standing or walking (MacCarthy 1968).
Older children who are failing to thrive appear to be apathetic or frequently irritable, weak, lacking physical energy, disinterested in any kind of activities and emotionally cold.

**BONDING AND ATTACHMENT**

An absence or distortion of 'mother-to-infant bonding' during the early stages of the child’s life is considered to be a major aetiological factor in various forms of child maltreatment - including failure-to-thrive (e.g. Vesterdal, 1976). The failure-to-thrive syndrome is commonly hypothesised to result from poor mother-child relationships and more specifically the inability of a mother to build-up and maintain a meaningful and loving relationship with her child, and the interactions mediating healthy nutrition which are generated by this tie. Her emotional indifference is evidenced by the restricted quality and quantity of the mother-child interactions. The mother's unreasonable and often angry negative child-rearing practices are considered (in some unspecified way) to affect seriously, the child’s physical and psychological development.

It is generally believed (and it influences their practice) by many paediatricians, midwives, social workers and psychiatrists, that mother-to-infant bonding takes place rapidly after birth by virtue of the fact that the mother
sees her offspring, touches it, holds it, feels it and gazes at it. It is suggested that if this process proceeds reasonably well the mother will be 'bonded' to her child by an enduring, responsible and focused emotional attachment. To sum up: it is believed that the quality of their future relationship is determined by their physical (skin-to-skin) contact, during the first post-partum hours or days.

In the case of mother and infant separation after birth there is often considered to be a risk of failure on the part of the mother to become 'bonded' to her child (e.g. Klaus and Kennell 1976). Further it is claimed that a higher percentage of child abuse is observed in premature babies in comparison with the normal population; this in turn is linked to the post-partum separation of mother and child (Lynch and Roberts, 1976).

The mechanisms and the very nature and conditions of attachment of children to their parents and adults are still rather poorly understood, in spite of quite an extensive literature on the subject over the last three or four decades (e.g. Bowlby 1951, 1969). The earliest assumptions of the danger of even a brief separation on the child's future mental health, the existence of a critical period in infant-to-mother attachment, an exclusive role for the mother in the formation of a bond, and the dangers of separation, have been revised and modified over the years, on the basis of growing empirical evidence (Bowlby 1969, Rutter, 1972, Schaffer, 1977).
The literature on mother-to-infant attachment is scanty and has been influenced (not always appropriately) by the child-to-mother attachment literature. Defining a bond is problematic. It is by no means clear how we assess the presence of a 'bond' or the lack of it, furthermore, how do we measure bonding? Which behaviours of the mother express the real thing? And is it a reified 'thing' as it is made to appear in discussions?

Mother-to-infant attachment is usually inferred in the scientific literature on bonding from highly specific aspects of maternal behaviours such as gazing, vocalising, smiling, touching, fondling, face presentation, responding to the baby's signals etc. Herbert et al. (1981) state that these activities show low positive inter-correlations and they do not have any necessary link with the concept of specific bonding. These behaviours belong to a range of so-called 'infant elicited social behaviours' which are usually displayed naturally by babies from 'care givers' and non 'care givers', almost at a level of unawareness, spontaneously. The fact that most normal women smile, touch, talk to other people's babies when they see them – despite the fact that they are not 'bonded' to them, tends to minimise their significance as special indications of attachment.

Whether they are indicative of bonding seems to depend to a certain extent upon the researchers or practitioner's interpretations of observed behaviour. Most studies are
preoccupied with the amount of physical contact with and care of, the baby. Herbert et al. (1981) state that these interactional characteristics may have a link (but not necessarily a sufficient or necessary one) with specific bonding. It is a well known fact, to social workers in particular, that some mothers who are known to love and treasure their children may nevertheless abuse them at times of acute and prolonged crisis and acute frustration. Again mothers who feel little or no affection or sense of belonging towards their offspring have been known to care meticulously and worry excessively about them.

Bonding implies a very special emotional relationship between two people which is specific and endures through time. It implies personal sacrifices taken at free-will and high levels of tolerance and patience. Maternal attachment (or bonding) implies a special and focused relationship towards the mother's own child. But one needs to recognise this quality of 'specialness' and be able to assess it. One assumption of a bond might be based on the mother's own statement of her attitudes and feelings toward the infants. The practitioner might feel that the mother is attached to her child if she constantly over a period of time, states that she loves her child, and has a sense of mutual belonging. On the other hand, if she reports indifference or hostility towards the baby and does not feel that they belong to each other she would presumably be adjudged 'unattached' to him.
Any practitioner who is uncertain or worried about the mother-child relationship, will want to examine the reliability of such reports in terms of deeds; and so attachment would be largely assessed in terms of her actions. In this case a mother would be considered to be bonded to her infant if she looked after him well, gave him considerable and considerate attention, and demonstrated her love for him in the form of fondling, kissing, cuddling and prolonged gazing (Klaus and Kennell, 1976).

All in all it is a difficult task to specify clearly the so-called 'maternal bond' and even more difficult to measure it. Most of the clinical discussions of bonding fail to take into account methodological problems of going beyond the rather vague and global definitions of bonding which are so common in case reviews and case studies, specifying precisely what it means. Herbert et al. (1981) state that there is a need to assess the significance and inter-relatedness of those component behaviours thought to be indicies of bonding. The assumption underlying the unidimensional view of bonding - that the various strands (or dimensions) of the so-called 'bond' are highly correlated - is questionable. Bonding is also assumed to be undirectional in the sense that it takes place only at a certain time and only if events take place in the appropriate manner (e.g. skin-to-skin contact).

However, an exclusive role of the mother as a bond creator is rather difficult to accept, and it begs a few questions.
If bonding is determined by the events immediately after birth, how could it be, that many adoptive parents or foster parents become strongly attached to a child? We know that foster parents and adoptive parents are capable of providing their 'children' with loving and self-sacrificing care (Tizard 1977). The step-parent can build up a deep emotional relationship with the step-child. How does this occur, given the parameters of bonding which are absent in cases of adoption and step-parenthood. Yet we know that bonding often takes place. Is it right or even reasonable to expect from some mothers immediate feelings such as the sense of strong belonging and love – especially at a time when she might be exhausted and weak after a hard pregnancy and difficult labour, or even ill or depressed?

Some foster mothers provide excellent care and meaningful interactions with their child, but yet do not feel deeply attached to him or her. Yet some of them after a period of having a child, show a distinct deep emotional tie – a sense of belonging, and acute emotional turmoil at the point of separation. Adoptive parents too come to love their child without the benefit of early post-partum sensitisation. We can learn to love, slowly or quickly and to different degrees.

It may be counter-productive to infer a mediating, reified bonding concept. It may lead to over simple pseudo-explanations; what is important is the pattern of care-giver-infant interactions (their quality and
quantity) and the special emotional 'flavour' of those interactions. These require precise and specific analysis (Herbert & Iwaniec, 1979).

EMPIRICAL STUDIES OF BONDING

Although the beliefs about mother-to-infant bonding are nowadays widespread, the number of empirical studies on the subject is relatively small (Carlsson et al., 1978, 1979; De Chateau, 1980, Jones et al. 1980, Kennell et al. 1974, Klaus et al. 1972, Leifer et al. 1972, Ringler et al. 1975, Sugarman, 1977, Svejda et al. 1980)

Leifer et al. (1972) investigated the effects of brief separation of the mother from her new born infant. Three groups of mothers were included in the study.

a) Mothers of full-term babies

b) Those of premature babies not being able to handle them for up to twelve weeks.

c) Those of premature babies who had some physical interaction from the start.

Subsequent mothering was observed in all cases and it was found that mothers in the three groups did not differ in their mothering. Nothing emerged from this study that showed any marked or lasting disruptions of normal maternal
behaviour in the "separation" group.

Klaus et al. (1972) observed some differences in maternal behaviour between those who had extended contact and those who had little contact with their babies. At one month after delivery, extra contact mothers had more eye contact and fondled them more during feeding than the others. The researchers did not follow them up during the subsequent months and therefore it remains uncertain whether the stronger "bonding" was evidenced later or not.

Kennell et al. (1974) followed up one year later the mother's from Klaus's study. They found that mothers in the groups did not differ significantly in mother-child interactions including that of mother-infant play. However, 'contact' mothers differed from 'non-contact' mothers in their answers to interview questions and were more attentive during the physical examination of the baby.

Other studies postulating a rapid bonding during an early sensitive period are also rather inconclusive. Ringler et al. (1975), are concerned with speech development, but it could not be inferred that speech delay was due to post-partum limitations of mother-infant contact, rather than to various other factors. Herbert et al. (1981) state that what is clear is that when authors have claimed that mother-to-infant bonding has occurred, or failed to occur in the early hours or days after birth (Klaus and Kennell, 1976; Sugarman, 1977) evidence was flimsy.
More recently Carlsson et al. (1978) found that contact between mother and infant for up to two hours after birth facilitated the mothers' feeding activity four days later. Whether the longer term consequences facilitated stronger mother-to-infant attachment remains entirely unproven.

The evidence for a sensitive period for the development of mother-infant bond is not only weak in the studies that are affirmative, it is also unforthcoming in various investigations. De Chateau and Wiberg, (1977) studied twenty-two-first time mothers and a control group of multi-parous mother. The 'first time' mothers who were given extra skin-to-skin and suckling contact with their infants after delivery, differed from the control group mothers, who had with their infants routine contact only, on four out of thirty-five measured variables. There were no significant differences in maternal affectionate behaviours.

Again, Carlsson et al. (1979) investigated fifty mother-infants dyads to establish the effects of extensive or limited mother-infant early contact and subsequent mother’s nursing behaviour; they didn’t find any differences in maternal nursing behaviour between the groups six weeks later.
Svejda, et al. (1980) tested the hypothesis that early and intensive mother-infant contact facilitates mothers' 'bonding' to a child. Fifteen primi-parous mothers had the infants for one hour at delivery and ninety minutes at each feeding. Fifteen control group pairs received routine contact, that is a brief contact at delivery and thirty minutes at each feeding. In order to minimise a feeling of "specialness" in extra contact, mothers who were not in the study but who shared a room with these mothers, had their infants longer at each feeding so that this apparent difference in contact time would be eliminated. No differences in maternal behaviour were found in twenty-eight discrete response measures (affectionate proximity maintaining, care-taking and miscellaneous response types).

So, the hypothesis that early contact and intensified mother-child interactions soon after birth determine strong formation of 'bond' to a child is, to say the least, questionable and not supported by the recent studies.

In addition, there are many indications in the literature, that the mother's attachment to her baby has to do with a variety of factors other than short-duration, post-partum contact (see Robson, 1981, De Chateau, 1980). According to Jones et al. (1980) the age of the first time mothers made a difference to subsequent mothering behaviour while extra contact after birth did not. Mothers eighteen years and
younger demonstrated less maternal responsiveness towards their infants, than did mothers of nineteen years or older. Robson and Kumar (1980) found that mothers who had an unpleasant or difficult labour showed less intense affection towards their babies or those who were clinically depressed at that time. Robson (1981) states that social class appears to be a significant factor in studies of maternal behaviour; so it is simplistic to see bonding simply as a function of post-partum contact between mother and child.

**BONDING AND CHILD MALTREATMENT**

It has been postulated (as mentioned earlier) that separation of the mother and infant for several weeks immediately after birth may damage irreversibly the subsequent mother-child relationship. It has also been claimed that mothers who ill-treat (e.g. physically or emotionally abuse) their children are mothers who have not been bonded to their babies soon after delivery.

The belief in a sensitive period for the development of a mother-infant bond and a warm relationship is not universal; nor is the alleged causal link with child-abuse proven satisfactorily. Cater & Easton (1980) investigated eighty cases of child abuse with particular reference to the separation of abusing parents from their newborn infants. Although early separation of parent and infant was found to be common in the families under investigation, combinations
of other stresses and conflicts were also much in evidence. It is the latter that were thought to have pre-disposed mothers towards baby battering. The authors do not argue, that lack of contact with newborn infants, has definitely nothing to do with subsequent battering, but they strongly advocate that for practical purposes, other stress factors which impair parent-child relationships, must also be given attention as important antecedents of non-accidental injury, e.g. unstable domestic arrangements and psychiatric disturbance and immaturity in the parents. Gaines et al. (1978) studied two hundred and forty mothers, from known abuse, neglect and minimal control populations. The multi-variate analysis included twelve variables of which six discriminated the abusing, neglecting and normal mothers at a high level of significance. Infant risk determined on the basis of neonatal complications which required hospitalisation, was not a successful discriminator. According to them the hypothesised relationship between mother-neonate bonding and maltreatment was not supported.

Dunn and Richards (1977) set out in a longitudinal study of seventy-seven mother-child pairs (from birth to five years) to see if a number of categories of behaviours that have been used as indices of affection did indeed intercorrelate. Correlations between measures were not high and they were unable to demonstrate a unitary attribute reflecting 'warm' mothering. The analysis of early feeding interaction indicated that measures of maternal affectionate behaviour do not co-vary in any
simple way. The different facets of maternal style are associated with different infant and delivery factors; success and co-ordination of the feed, for instance, are affected by labour and delivery variables; total sucking, for example, is correlated with differences in the infant’s reactivity (latency to cry on removal of teat) and not with the measurement of affectionate style and contact.

Touching the baby—often used as an index of maternal feeling—did not correlate with the other measures of maternal ‘affection’. The baby was a vital contributor to the early differences in mother-child interactions. Simplistic and reified usages of bonding as an explanatory concept would not seem to do justice to a complex psycho-social problem like child abuse, or for that matter, failure-to-thrive.

Another area of work which relates to the establishment of mother-infant attachment and which may have implications for the high incidence of prematurity and handicap amongst abused children, concerns the aetiological concept of the ‘sign stimulus’. Lorenz (1943) and Eible-Eibisfeldt (1975) suggested that the characteristic head proportions and facial features of a newborn child termed the ‘Baby Schema’ serve as an acute sign stimulus in eliciting protective responses and inhibiting aggression from the parents. More recently Hall Sterngtanz et al. (1977) have conducted an experimental investigation of a range of infant facial characteristics to determine which evoke particular responses in adults. They conclude that their
Results support an aetiological view and furthermore, suggest that the analysis of infantile characteristics may have implications for the treatment of disturbed parent-child interaction. One may assume therefore, that abused children lack such stimulus characteristics and thereby, fail to inhibit aggressive behaviours. Although this may be true in certain cases, any such connection between infant characteristics and child abuse will again be mediated by the interaction of the mother and her infant, rather than being simply directed from the child to the parents. Mothers report that the communicative characteristic of a young infant which is a major irritant (even in non-abusing families) is that of crying.

According to Wolfe (1969) there is the basic cry, the 'angry cry' and the 'pain ' cry. The basic and angry cries occur when the infant wants to be fed or when there is an absence of adequate stimulation from the parents for example, in the form of comforting and cuddling.

Konner (1972) reports that in Bushman society the mother carries her infant close to her body and quickly responds to his needs, usually before crying begins. Ainsworth (1977) has stressed the part played by the mother's responsiveness to crying in the formulation of a secure attachment and in reducing the frequency with which the infant cries. This is thought to be affected by maternal attitudes, for example, whether the mother believes in feeding and cuddling on demand or in an abusive relationship; these attitudes are probably related to the
mother's distorted expectations of the infant. Such distortion has been reported in a number of studies (Martin, 1976; Kempe & Kempe, 1978, 1980) This problem may be related to the isolating of the nuclear family, a feature which is of recent origin.

The extended family environment is an important back-up when one considers that part of modern evolutionary theory which suggests that an infant will tend to maximise the chances of the passing-on of its own genes — by demanding more parental investment than the parents, in terms of their own genetic 'fitness', are able to give. Trivers (1974) has used the term 'parent-offspring conflict' to refer to this phenomenon.

STUDIES OF CHILD-TO-MOTHER ATTACHMENT IN ABNORMAL INFANT POPULATION.

While the concept of attachment has received considerable attention in the literature, empirical research in this domain has been limited to mainly normal middle-class populations. Virtually no research has systematically explored patterns of attachment in abnormal infant populations (see Gordon et al. 1979). Inattention to abnormal development has resulted in the observation of only a narrow range of responses, mostly concentrated on emotional development in the first year of life.

Such limited conceptualisations when it comes to
considering maternal deprivation, encourages a view of infant as a passive victim of the mother's distorted or insufficient caretaking and lack of bonding, a view which is at odds with recent risk research on the infancy period (see Somercroft & Chaudler, 1975). Bullard et al. (1967) following Ainsworth (1962), broaden the concept of maternal deprivation to include various forms of 'distortion in the mother-child interactions', giving it a developmental context. These authors note that maternal behaviour which may be 'depriving' to the child at one developmental stage, may be experienced very differently by the child at another. This view stresses the interactional qualities of the infant-mother relationships and raises the question of the infants's contribution to his own vulnerability, also his perception, understanding and attribution of events as he matures.

Gordon et al. (1979) are among the earliest researchers to study attachment in non-organic failure-to-thrive infants. Twelve infants, twelve to nineteen months of age, and hospitalised during the first year of life with a diagnosis of non-organic failure-to-thrive were compared with matched controls and observed in a modification of the Ainsworth 'Strange Situation'. Subjects and controls were matched on age, race, sex, socioeconomic status, age at hospitalisation and length of hospitalisation. Subjects were predominantly working-class.

Classification by means of the Ainsworth 'Attachment Scale' revealed that six of the twelve non-organic
failure-to-thrive children were classified as insecurely attached while only two of the twelve controls were so classified. In addition, there were no cases in which a non-organic failure-to-thrive subject was rated as securely attached, while his matched control was rated insecurely attached. While the sample size of the study is quite small, these results indicate that half of the patients with the non-organic failure-to-thrive diagnosis are experiencing conflicts in the mother-child attachment of sufficient severity to be judged as insecurely attached. Gordon and his colleagues note that the studied group can be distinguished on the basis of their affective behaviour. The non-organic failure-to-thrive show a strong tendency to employ the milder affect of fretting, rather than the stronger one of crying during the mother’s absence. Only two failure-to-thrive infants cried during the mother’s absence, nine of the twelve fretted during this period. By comparison, the control group appeared to cry and fret with about equal frequency. Those findings did not reach the conventional level of statistical significance. They postulated on the basis of their study that children hospitalised in the first year of life with non-organic failure-to-thrive are at greater than average risk for insecure attachment. However, even within this group of abnormal infants, attachment outcome was not uniform. Indeed half of these children were classified as securely attached.
Closer inspection of factors associated with the quality and meaning of attachment is needed to clarify this issue. For example, most studies of non-organic failure-to-thrive infants and children indicate that these infants are developmentally delayed in locomotion and communication skills, are temperamentally more passive in mood, and lower in tempo of their play that the control groups. While the aetiology of these differences is not clear, it seems reasonable to speculate that such development and temperamental differences may influence the nature of attachment to the mother (Jameson et al. 1977). The tendency to fret in non-organic failure-to-thrive infants rather than cry during the mother’s absence, would support the findings of Serafica and Cicchetti (1976) who note that children with Down’s Syndrome cried much less than a control group during separation from the mother. They attribute this tendency to differences in the functioning of the sympathetic nervous system in these patients. Whether the same applies for the non-organic failure-to-thrive group is a matter of speculation.

Ferholt and Provence (1976) observed that diminished growth hormone secretion is a consistent finding in older children with psychophysiological growth failure. They note that there are many neurological pathways linking areas of the control nervous system involved in affective behaviour with brain centres controlling bodily functions. They hypothesise that “certain disturbances in the parent-child
relationship may affect certain vulnerable infants so as to create a disturbance in mid-brain function, which is associated with a psychological situation analogous to apathy, anxiety and depression (p.447).

The data in the Grodon et al. study on attachment indicates the possibility of sub-groups within the non-organic failure-to-thrive infants. While most researchers tend to implicate the role of maternal caretaking in the aetiology of the syndrome, their study points as well to the need to explore the differences in temperament and behaviour of the infants themselves. This desideratum (it will be argued) is nicely met by a conceptual framework grounded in social learning theory. Parental and child variables (e.g. attachment behaviour, personality, temperament) are investigated for possible significance (see Section III).

SUMMARY

The failure-to-thrive and child abuse populations overlap and in the sense that maternal rejection, hostility and neglect play a part in both conditions, they share an area of common causation. However, there are differences in the manifestations of problems in the victims of abuse and those suffering from failure-to-thrive. There is greater specificity in what occurs in the latter group which must be explained. Bonding distortions and failure are postulated as mediating maternal rejection in both problems. The concept is vague and in its ethological/
imprinting basis poorly supported. However, it is worth exploring parent-child attachment in the present study.
Feeding and eating disorders are often present among the behaviour problems displayed by children and adolescents. Nearly all parents complain at one time or another about their children’s eating problems. Frequently such concerns focus on the parents beliefs or preferences about appropriate eating habits. The parents complain that their youngsters do not eat enough, or do not appear to eat proper food, or they do not eat at a proper time. However, these eating complaints do not constitute serious (i.e. clinical) problems, but would reflect on parental prejudices, expectations, mismanagement and faulty training. There are however far more serious eating problems which, if not resolved, might bring about serious consequences like anorexia nervosa, bulimia and acute oppositional behaviour with regard to the process of eating (refusal to eat and faddiness).

ANOREXIA NERVOSA

Anorexia nervosa is a condition of self-inflicted starvation that occurs most often in adolescent females. Although failure-to-thrive is a childish disorder we may
learn something from the literature on anorexia nervosa. Only about four to six percent of anorexics are male and about ninety six percent are female. (Halmi 1978). Some writers have estimated that for females between twelve and eighteen years of age, the prevalence may be as high as one in twenty (Crisp et al. 1976). It also seems to occur more frequently in families that might be considered above average socioeconomically. The causes are usually complex and difficult to identify. The disorder is not only a complicated one but it (like failure-to-thrive) can be life-threatening in some cases. Individuals who are suffering from the disorder seem to be driven by the need to be thin, or more specifically, by an obsession to avoid being fat. This results in a sharp reduction of food intake and is often accompanied by an almost frantic exercise routine. Such an intentional feature does not occur in failure-to-thrive, not surprisingly. Anorexics are characterised as 'intellectually' superior perfectionists, over sensitive and manifesting compulsive behaviours (Kolb 1977). Some writers have attributed the disorder to hormonal and endocrine problems (Dippe, 1978, LaCrone, 1979) others have postulated underlying psychological problems (Boskind-Lodahl, 1976). Perhaps the most common view of causation stresses environmental influences, often involving parental attitudes and behaviours and the impact of adverse family relationships or other life stress situations (Bruch 1978, Halmi 1978). Here we are on somewhat common ground with failure-to-thrive. One theory related to development and environmental influences,
suggests that anorexics have not learned appropriately to label the sensation of hunger (Agras, et al. 1974). The eating behaviour of anorexics varies from almost not eating at all (viz. food avoidance) in what is essentially a phobic condition, to eating enormous amounts (bulimia). Palmer (1980) describes distortions of eating behaviour in this group of people which is remarkably similar to the eating and non-eating behaviour of non-organic failure-to-thrive children. There may be almost nil intake, but then the amount of food eaten during another episode may be large and excessive.

It seems that for some individuals the struggle to control their weight by abstinence alone becomes too much and they find additional strategies for coping. Palmer (1980) suggests that these individuals are the ones in whom the hunger drive is the greatest, or the control of impulses, is the least developed.

It is these subjects who go on to the second broad pattern of eating behaviours (not seen in failure-to-thrive) which is characterised by over-eating followed by self-induced vomiting and often by the abuse of laxatives and other drugs. The onset of self-induced vomiting is a considerable complication in primary anorexia. Anorexic subjects often develop a considerable facility for vomiting. An individual may come to be able to vomit at will without, for instance, the need to stick her fingers down her throat. Sometimes vomiting may allow the person
to return to a more regular pattern of eating whilst avoiding weight gain. Two or three meals are eaten each day, but two or three meals are vomited up again in secret shortly after they are eaten. Apparently even chronic vomiters have times when they return to a predominantly abstemious pattern. Although regular eating and regular vomiting may sometimes allow a kind of stability, the change from the abstinence mode into the over-eating and vomiting mode more often than not leads to a marked loss of stability, both of behaviour and of physical status; the seesaw swings more wildly and the anorexic finds herself in an ever increasing frantic and chaotic state. The impulse to eat may become extreme and the preoccupation with food overwhelming. This may well be the outcome (although the route is different in the immature child) in failure-to-thrive children who are bulimiacs. An extraordinary amount of food of all kinds may be eaten in binges which go on until the stomach can take no more and copious vomiting follows. Such massive and impulsive over-eating is known as bulimia.

**BULIMIA**

The food which is eaten during binges usually includes all the fattening carbohydrate-rich foods which are avoided in periods of abstinence. Cream cakes by the plateful, whole loaves of bread, packets of sweets, biscuits and quantities of cheese are eaten rapidly and avidly but with little pleasure. Guilt and self disgust mount as the abdomen
swells and only vomiting brings relief and a brief respite. Sometimes feeding behaviour becomes bizarre. Vomiting (as we have seen) is one method by which the link between diet and weight can be disrupted but there are often others. Firstly, an anorexic may take increasing quantities of purgatives to produce diarrhoea and that way get rid of the food eaten; this is especially so subjects with the bulimia disorder. Secondly, diuretic drugs are taken, in their struggle with their weight.

It is obvious from the foregoing that the primary drive of hunger and instrumental acts such as selecting and searching out food and eating, can be overlaid, indeed distorted, by poorly understood psychosocial events. The results (like the mysteries of failure-to-thrive) can seem bizarre, un-understandable and contrary to logic and commonsense. Life may be threatened, deaths do indeed occur. This puts a great strain on families and the helping professions; crisis intervention may, as a result, be panicky and ill considered (emergency action) rather than measured and planned for the longer term.

Such considerations make it imperative to take a long view, thinking in preventative terms, which also implies an understanding of the precursors of children's behavioural (and specifically eating) disorders. Teaching a child the routines and rituals of social life (with regard to eating, sleeping, dress and manners, self-control etc.) requires a degree of co-operation from the infant, a bias toward social stimulation and accommodation to the demands of parents.
Most children show this inclination; others are resistant to the processes of socialisation and seem temperamentally so!

TEMPERAMENTAL AND BIOLOGICAL ADAPTABILITY

Strangely enough in modern times (and certainly until the 1950's) most theorists seemed to imply that all neonates were more or less the same until the environment began to shape their individuality; and if they later developed some kind of behavioural disorders it was mainly due to these environmental experiences, adverse child-rearing practices and so on. A series of research investigations on infant individuality for a number of years, on both sides of the Atlantic, have shown these assumptions to be false. Perceptive people who work with babies are quite aware that even newborn infants vary markedly in their spontaneous behaviours and reactions to any given stimuli. They are proactive as well as reactive - behaving in a highly idiosyncratic manner from the beginning of life. These individual behavioural styles, the apparently inbuilt way the child responds to his environment and child-care practices is called temperament.

Temperament is a phenomenological term to describe the characteristic tempo, rhythmicity, adaptability, energy expenditure, mood and focus of attention, independently of the contents of any specific behaviour. These individual
differences carry important implications for later development. They have important implications for our consideration of feeding disorders, because they have a good deal to do with the child’s biological regularity or irregularity (feeding, passing motions, sleeping etc.); his/her malleability (and resistance to new situations, changes in routine, etc.) her/his level of intensity of response and prevailing mood.

Until the 1950’s there were few specific studies of behavioural individuality in early childhood and these were usually limited to two or three aspects of behaviour such as general activity level, intensity of reaction or sensory threshold (Gesell and Ames, 1937; Shirley 1933). In the 1940’s and 1950’s a number of studies reported differences in infants and young children in areas of functioning such as mobility, perceptual responses, sleeping and feeding patterns, drive endowment, quality and intensity of emotional tone, social responsiveness, automatic response patterns and biochemical individuality. However, no long term investigations were available to report on the relationship between these findings of early life features and the later course of normal development, and indeed of the genesis of psychological disorders.

Only in 1968 did the first longitudinal study appear, conducted by Thomas et al. (1968), it involved one hundred and thirty six New York children (mainly middle class) who were seen regularly soon after birth and for many years
thereafter. Their study (which will be described in the next chapter) inspired many modern researchers to look at the child as a unique being in whom both genetic and environmental factors come to play an important role in his future development and well being (Graham et al. 1973, Rutter, 1975, Carey, 1970, 1977; Schaffer, 1966; Cameron 1977).

The authors of the New York longitudinal study were concerned that environmental influences were given too much weight in ascribing influences on the growth and development of a child’s personality. They felt that the importance of constitutional determinants were severely underplayed and that a corrective was necessary to the strong ‘nurture’ emphasis found in the then dominant learning and psychoanalytic theories of development. Aside from the theoretical issues these authors had a humanitarian concern. They felt that the unrelieved environmentalist perspective forced parents to take (sometimes) undeserved ‘blame’ for any (and all) deviancies in their children. Authors such as Thomas et al. (1968), Graham et al. (1973) introduced a new and more comprehensive framework for assessing life-problems - by reintegrating the concepts of constitution and environment into a model which incorporates the dynamism of the individuals biological and psychological reality.

By focusing on infant individuality they have been able to demonstrate that certain children with ‘difficult’ types of
temperament manifest problems for parents and parenting such that the hapless caregivers are often unable to cope. In many of the situations they describe, a train of events involving aversive parent-child interactions has produced deviant children, demoralised parents and generally unfavourable developmental outcomes. They further argue that the responsibility for these outcomes cannot be placed totally on either the parent or the child. The child cannot be blamed for his constitutional uniqueness and the parent cannot be blamed for using socially acceptable child-rearing norms which will not work with their particular child. They appeal for an awareness of the interactive problems presented by children of certain temperaments and prescribe the necessary caretaking adaptations.

One reason for the late appearance of knowledge about individual differences was that most researchers and professional workers concentrated on the study of environmental influences in child development: first and foremost the mother; then the father (if at all); next other intrafamilial influences and finally larger sociocultural environmental factors. Even the psychoanalytic school with its basic assumption of intrapsychic conflicts and instinctual drives, had concerned itself largely - especially the Neo-Freudians - with the influences of the parents on the unfolding and shaping of the presumed drive states. Such studies have identified many pertinent influences of parental attitudes
and practices, sibling relationships, patterns of family relationships, social values and cultural norms on evolving personality and behaviour patterns.

These studies revealed the fallacies of fixed constitutionalist views in which even such complex behaviour and personality characteristics as honesty, criminality, courage and timidity were ascribed to inborn traits. But, the exclusively environmentalist approach has been unable to answer certain basic questions in child psychology and child development. Why do youngsters exposed to the same kind of parental influences so often show markedly different directions of personality development? Why is there such variability in the effects that normal or mentally ill parents have on their children? Some of the children or normal parents develop problems; offspring of mentally ill parents may develop serious psychological disturbances, others develop mild problems, and still others mature as if immune to the stresses produced by their parents' problems. Why do some parents who show no evidence of any significant psychiatric disturbances and who provide a good home for their children sometimes have a child who manifests serious psychological disturbances? And why do some children come through adversity unscathed? Why do the rules and methods applied by parents to their children in feeding, weaning, toiletting and so on, never seem to work equally well for all their children - even when applied by intelligent and conscientious parents?
These questions provide us with a cue to examine the issue of compliance and non-compliance in children (We return to the issue of temperament after a brief interlude).

SUMMARY

A brief review of the feeding disorder (anorexia nervosa) of, mainly, adolescents sheds little light on failure-to-thrive, a disorder, mainly, of infancy. There is a similarity in some of the distortions (refusal, fear) of eating and the occasional swings to unrestrained eating (bulimia). But, apart from a common association with adverse parental/familial factors, there seems little to learn from the study of anorexia nervosa, which (with its onset in adolescence) is psychodynamically and cognitively complex and different from the infantile problem.

Temperament is introduced as a potentially useful concept because of its significance as a moderating variable in child development and child rearing and because of its relationship to biological cum social actions such as feeding.
Eating involves a voluntary action on the part of the child, and one (in our weight-conscious society) which is carefully monitored by baby clinics and anxious mothers. It is said that you can lead a horse to the trough but you can’t make him drink. You can give children food but you cannot force them to eat. Eating problems like persistent faddiness and refusal to eat are commonly observed in children who display serious non-compliance which is also referred to as negativism or oppositional behaviour (Herbert 1974). Children are quick to spot the power they have because of ‘mum’s’ anxiety that they do not miss a meal.

Non-compliance to parental requests is one of the most common forms of behaviour problems in childhood. Johnson et al. (1973) state that nearly one third of children’s deviant behaviour involves serious non-compliance. The child refuses to obey it’s mother’s commands or does the opposite of what she asks (negativism). In several studies such negativism has been isolated as an important class of behaviour pathology in early childhood (Levy, 1955, Patterson and Brodsky, 1966, Plant, 1941). Eating problems occur against a backdrop of varied circumstances, but notably a pattern of resistance to parental commands and wishes. There is no doubt that one of the most
important aspects in the development of a child's disposition to conform to the rules of his society, is the development of an initial bias towards compliance to parental teaching. Not only is compliance a necessary condition of such socialisation but its absence — serious and persistent non-compliance is recognised as a major component of the conduct disorders (Levy, 1955). Hence there is a need to discuss the development of compliant behaviour. In the present thesis, however, the topic can only be considered briefly.

The earliest signs of compliance in the child appear towards the end of the first year, when for the first time the parents begin to make demands upon their child and these increase as the infant becomes a toddler whose interactions with the environment multiply as he becomes increasingly mobile and verbal. Stayton et al. (1971) studied the origins of socialisation by looking at infant obedience and maternal behaviour. Their first assumption is that a child in the process of being socialised acquires a set of specific roles, attitudes and responses that typically conform with social pressures. A child may learn these responses, because he has been reinforced for them, or he may imitate the behaviour of the person with whom he identifies. It is implied that a child acquires a willingness to comply with these specific roles, rules and response patterns at the same time that he acquires the behaviour pattern. The specific content of parental demands will vary but this development of an
initial unspecified disposition towards compliance may be critical for the effectiveness of all further socialisation practices.

The second assumption concerns a recognition of the central problem of socialisation, the question is asked 'what must be done to a child in order that he acts in accordance with the rules of his society?' This then implies that children who are well socialised become so only as a result of specific intervention tactics designed to foster social learning or identification. It also implies that children who appear unsocialised have become so because these socialisation procedures were inadequately applied.

The third assumption implies that there is a fundamental antagonism between a child and his family - between natural behavioural tendencies and cultural constraints. But equally defensibly a further assumption is, that as man has evolved as a social species, infants will be genetically biased towards certain social behaviours and will be preadapted to ordinary expectable social environments. thus children are sociable from the beginning.

Stayton et al. felt the important common theme in these assumptions to be disposition for obedience, which does not require as a condition for its aquisition, a rigorous and specialised training regime.

The hypotheses were that an infant whose mother is accepting, co-operative and sensitive to signals will tend
to obey her verbal commands and prohibitions more consistently than an infant whose mother is rejecting, interfering and insensitive. Further, that this tendency to comply is independent of his mother’s specific socialisation tactics or disciplinary procedures. The hypotheses were tested out on data obtained from twenty-five mother-infant pairs observed at three week intervals for four hours throughout the first year of life (fifteen boys and ten girls). In the last three months of the study (children from nine months to twelve months) data was obtained on three maternal variables (sensitivity -insensitivity, acceptance-rejection, co-operation and interference). On three maternal behaviours (frequency of verbal commands, frequency of physical interaction and extent of floor freedom permitted to the child) and on four infants variables (sex, I.Q., compliance to commands and internalised controls).

The results showed that the measures assessing the quality of the mother’s interaction with her infant were highly intercorrelated, and further, the infants compliance to commands was strongly and positively related to all three indices of quality of mother-child relationship. The two measures of maternal discipline - frequency of verbal commands and physical intervention, were shown to be positively correlated and neither of these practices, or the amount of floor freedom permitted the infant was significantly related to compliance and commands. Thirdly the infants use of internalised controls was not
significantly correlated with compliance to commands, but internalised controls were positively related to I.Q., to the amount of floor freedom permitted to the baby and to maternal sensitivity, acceptance and co-operation. The authors conclude that a disposition towards obedience emerges in a responsive, accommodating social environment, without extensive training or discipline or other massive attempts to shape the infants course of development. This study is felt to be relevant because it draws attention to the importance of the total mother-child interaction, showing that it is not always particular disciplinary techniques which produce the disposition to compliance in very young children, but that the manner of the mother and the relationship with her baby can be crucial.

The disposition to compliance or a willingness to comply is, therefore, the beginning of the development of actual compliance in the child. Serious problems at this stage due to noxious factors (for example, adverse, temperamental attributes, parental rejection, etc) on either the infant or parental side of the interaction may well hinder many of the subsequent attempts at socialisation. Just as the study defined types of maternal behaviour which produced high levels of compliance in the infants, so also there may be types of maternal behaviour which will produce high levels of non-compliance. Further, as maternal behaviour is now acknowledged to be very influenced by the behaviour of the infant (Bell 1968), interactions leading to problems in socialisation at this early stage may be triggered by
either or both of the interacting parties (Herbert 1974).
One could then assume that early feeding difficulties which
are manifested by children are due to the combination of
maternal handling and her interaction with a child with a
particular temperament—during the feeding time.

Acutely oppositional behaviour in a child, particularly
regarding feeding and toilet training can invoke intense
anger, frustration, resentment, helplessness and
indignation in the person against whom it is directed.
A child who persistently refuses to eat, screams and cries
when it is being fed, creates hostile responses towards
himself. Various research findings suggest a strong
component of anger and rejection in the feeding style of
the mothers whose children fail to thrive. Such brusque
and rough feeding patterns—whether cause or effect of the
child's feeding difficulties—do not facilitate such a
delicate psycho-socio-somatic activity as eating and
digesting. Issues such as early child-rearing and
child-care patterns must obviously be researched in any
investigation of failure-to-thrive (Chapter 8a).

ASSOCIATION BETWEEN TEMPERAMENT AND BEHAVIOURAL DISORDER

We referred earlier to the work of Thomas et al. (1968).
They view temperament as neither purely genetically
circumscribed nor environmentally determined. It is viewed
as an interaction between predispositions and external
influences. The infant is considered in a much more
positive way as a proactive and competent being - and his
own contribution to shaping his environment from earliest
infancy is taken into account. These researchers conducted
systematic interviews with parents to elicit their
children’s day-to-day behaviour. Nine categories of
behavioural style (that is how the child behaved, rather
than what he did) were derived from an inductive analysis
of the initial interview protocols.

These categories are:

1. Activity level or energy output.
2. Rythmicity of biological functions, (sleep, wake,
cycle, hunger, satiety, etc).
3. Approach or withdrawal to new situations.
4. Intensity of emotional reaction (e.g. whether the
child roared with laughter or smiled quietly).
5. Threshold of sensory responsiveness.
6. Adaptability (that is how easily his behaviour changed
in response to altered circumstances).
7. Quality of mood.
8. Distractability and attention span.

They found they could distinguish three clusters of
temperamental characteristics on the basis of these
attributes; which were grouped under the terms: 'difficult
babies', 'easy babies' and 'slow to warm up'.
The difficult child showed irregularity in biological
functioning, a predominance of negative - withdrawal - response to new stimuli, slowness in adapting to changes in the environment, a high frequency of expression of negative mood and a predominance of intense reactions.

The easy child, on the other hand, was positive in mood highly regular, low or mild in the intensity of his reactions, rapidly adaptable, and usually positive in his approach to new situations. In short, his temperamental organisation was such that it usually made his early care very easy. The third temperamental type - the slow to warm up - showed low activity level combined with negative responses of mild intensity to new stimuli with slow adaptability after repeated contact. An infant with such characteristics differs from the difficult child in that he withdraws from anything new, quietly rather than loudly. In addition, he does not usually exhibit the intense reactions, frequent negative mood and irregularity of biological function of the difficult child.

The authors found that sixty five percent of their sample, could be assigned to one of three general types of temperament. Some forty percent were 'easy', ten percent were 'difficult' and fifteen percent 'slow to warm up'. That left about thirty five percent of children who show a mixture of characteristics not fitting into any of three groups.
A factor analysis based on intercorrelations on the nine categories of behavioural style identified a factor called factor A, which had high loadings on mood, intensity, approach/withdrawal and adaptability, and showed relative consistency over the first five years of life.

A comparison of the clinical and non-clinical groups showed that over the first five year period, and beginning at about the third year, the clinical group began to deviate markedly from the non-clinical group in the direction of negative mood, marked intensity, tendency to withdraw and be non-adaptive. The children who possessed these patterns of behaviour became known as 'difficult children', and were far less likely to grow up without behaviour problems. (Seventy percent of the temperamentally difficult children were reported to develop such problems compared to thirty one percent of the whole group who developed problems).

Two studies in Britain produced similar results. Rutter et al. (1964) followed a group of children from infancy and compared characteristics of behavioural reactivity of the twenty one who came to psychiatric notice with the seventy one who did not.

The clinical cases differed significantly from the others in that they were more irregular, non-adaptive, intense and exhibited more negative mood. Further, these temperamental characteristics were present before the onset of the overt symptoms, and did not themselves constitute the first signs of behavioural disturbance
A later study, Graham et al. (1973), assessed sixty children between three and seven years of age, from London working class families, each of whom had at least one mentally ill parent, for both temperamental difficulties and behavioural disorder. They again found that certain temperamental characteristics, especially low habit regularity, low adaptability, high intensity fastidiousness, were predictors of the development of later psychiatric disorders. They argue that effective prevention is more likely if we can identify which children are most at risk. They suggest that there is a link between adverse temperament and adverse family attitudes and relationships. Their findings support the notion that a child by virtue of his personality structure requires handling geared to his individuality if he is to stand the best chance of avoiding the development of psychiatric disorder.

Cameron (1977) has measured the interrelationship between various risk dimensions (child temperament and change scores, eight parental dimensions of behaviour) over a five year period. The parent dimensions include:

1. Parental disapproval, intolerance and rejection.
2. Parental conflict regarding child rearing.
3. Parental strictness, i.e. permissiveness.
5. Depressed living standards.
6. Limitation on the child’s maternal supports.
7. Inconsistent parental discipline.
8. Large family orientation.
Children's temperamental scores when correlated with eight parent domains, revealed that parental intolerance, inconsistency and conflict were associated with negative temperamental changes. Strictness and maternal concern/protectiveness correlated with both positive and negative changes depending on age and sex. Parental disapproval, intolerance and rejection showed the strongest association with both yearly temperament scores and change scores across the first five years.

Carey (1972) developed a short parent questionnaire form for the infancy period and utilised it to study the relationship of temperament to certain behavioural symptoms in infancy. In an unselected sample of sixty infants six months of age, he found a significant correlation (p.<0.02) between night waking and low sensory threshold. He suggests two possibilities to explain this correlation:

a) That greater responses to stimuli in the day make the infant continue to be arousable at night.

b) That the infant is more responsive to internal and external stimuli at night as well.

Carey suggests that 'maternal anxiety, anger, or feelings of helplessness' may be the result rather than the cause of the baby's waking.

Ross and Ross (1976) have identified a syndrome of behavioural disturbance which they designates as 'the unorganised child'. According to Ross, this syndrome results from a combination of high destructability, short
attention span and low persistence in the child in interaction with disorganised functioning or overpermissiveness in the parent. If the unorganised child also has a high activity level he may show restlessness and a tendency to chatter disruptively. If he is less active he may daydream, and if he is intense in his reaction he is likely to show temper tantrums.

Although some characteristics may always put the child at risk, many characteristics may be adaptive or maladaptive according to circumstances. For example, overactivity as demonstrated in Herbert's (1980) study was among the main contributory causes of serious conduct disorders and under-achievement at school. But in a study of institutionalised infants, Scaffer (1966) found that the most active infants were the ones who were least likely to show developmental retardation. Obviously there are degrees of activity— and up to a certain level an active child has adaptive attributes which are attractive and enhance learning and social interaction. Hyperactivity on the other hand, is generally aversive to adults.

TEMPERAMENT AND MOTHER/CHILD INTERACTIONS

Most studies of parent child interaction have assumed (or at least implied) that it is parents who exert the sole (or major) influence on children. A number of writers in recent years (Bell, 1974; Herbert, 1974) have argued that the interaction is a two-way affair in which children also
help in significant ways to shape parental behaviour.
The validity of this notion has now been shown in a variety of rather different studies. For example, Levy (1958) found in a study of nursing mothers that each mother’s behaviour towards her infant was considerably influenced by what state the baby was in when brought for feeding - whether awake or asleep, placid or irritable. Yarrow (1963) found that the maternal behaviour of a foster mother was altered by the attributes of the infant placed in her care. Different infants elicited different maternal behaviour so that the amount of stimulation and comfort she provided varied with the infant’s temperamental characteristics. Recently Rutter (1977) reported that Campbell (personal communication, 1974) has also shown that active infants in a neonatal nursery get more attention from the nurse than do the inactive infants (an observation which helps to explain Schaffer’s findings that more active infants were less affected by depriving environments - it was likely that because they elicited some stimulation they were in fact less deprived.

Physical or developmental handicaps in the child may also influence parental behaviour. Chavez et al. (1974) found that malnourished children were often ineffective in gaining parental attention. Similarly, it appears that children with congenital handicaps receive patterns of parenting which are somewhat different to those experienced by normal children (Cummings, et al. 1966). In addition, there is some evidence that a child’s level of language

There is some evidence that children's characteristics help shape parental behaviour. Osofsky and O'Connell (1972) manipulated the extent to which children exhibited dependent behaviour by varying the level of difficulty of the laboratory tasks they had to perform. They found that when the children were being dependent, their mothers interacted more with them, both verbally and physically, and displayed more controlling behaviour. In short, there is a growing body of evidence that children's characteristics serve to elicit different behaviours from other people.

Thus it is possible to suggest with some conviction that a potentially significant factor in the development of behaviour problems is a temperamental or congenital factor in the child - one which has powerfully modified the parents interactions and the manner in which they have reared him. This influence can range from the trivial to the height of significance (see Harper, 1975). Sameroff (1975) was able to find confirmation of the hypothesis that characteristics of the child may predispose parents to child abuse (e.g. battering) or neglect. He states that breakdowns in the parent-child relationship may take a great variety of forms. To quote Sameroff (1975, p.275):

The most heavily researched and carefully
documented of these transactional failures relates to the inability of parents and children to work out an interactional style which both guarantees the child a reasonable margin of safety and satisfies the child's basic biological and social needs. This is the issue of child abuse. Physical abuse is dramatic evidence of a disorder in the parent-child relationship.

It is not difficult (although one must always be cautious in doing retrospective analyses) to see how the attributes causally associated with a disorder might have had their earlier effects on parents. The highly irregular child who never settles to a steady sleeping or eating routine poses particular problems for his mother who will find it difficult to arrange her life, just because her child is so unpredictable. The malleable child who easily adapts to changes and new situations is likely to be very much easier to bring up than his nonadaptable brother whose behaviour is so tiresomely difficult to alter. Because children with these attributes are so unrewarding and difficult to rear, they may well arouse more irritation and the parents may come to expect problems because they have occurred before. Such expectations may become self-fulfilling in their effect on the child, and so a vicious circle is created. Parents become increasingly unrewarding to their offspring; the child becomes increasingly attention-seeking and demanding...and so on.
The London study to which reference has already been made (Graham et al. 1973; Rutter et al. 1977) provides some evidence that this does in fact occur. Children with high scores on the temperamental adversity index were only slightly more likely than other children to come from homes with marital discord. However, within such homes they were much more likely than other children to be the subject of parental hostility and criticism. Whereas the great majority of children with high scores on the adverse temperamental attribute (t.a.) index were the subject of those with low scores on the t.a. index.

It seemed that children with adverse temperamental features were more likely to be scapegoated at times of family difficulty. Parental criticism and hostility were strongly associated with the development of behavioural deviance and psychiatric disorder in children. Often parents were highly critical because of their own difficulties (many were chronically depressed); but which children were the subject of criticism was determined in large part by the children's characteristics. Some children are much easier to love than others because they are lively, responsive and interesting. More of an effort may be required to love a passive, inert and unresponsive infant who seems to 'give nothing back'.
Parental behaviour is not merely instinctive. Parents need the child to look at them, to cuddle, to smile and respond to their overtures and if, for any reason, the child does not do that, being a parent may be more of an effort. A sense of rejection may even be felt by the parents. The kind of problem that can arise is illustrated for example by the Klaus and Leiderman studies (Klaus et al. 1972; Leiderman et al. 1973; Leifer et al. 1972) which showed that mothers of small premature babies who were separated from them in the first few weeks of life (because they were in an incubator or an intensive care nursery) tended to be less confident and less attentive to their babies. This effect probably arose, in part, from the fragile rather unresponsive nature of very premature babies, and partly from the lack of contact with the baby during the early period when mothering skills and familiarity with the baby could be developing. Some studies, tangential to those mentioned above, have worrying implications; they suggest that in any one family it is the children who are born after difficulties in pregnancy or delivery and who were separated from their mothers in the neonatal period who are disproportionately represented in the population of children who are victims of abuse (e.g. Lynch, 1975). The evidence was examined in an earlier chapter (but see Herbert et al. 1981).

Herbert (1980) postulates (on the basis of research at the Child Treatment Research Unit, University of Leicester,
with hyperactive conduct disordered children) that many of these children are difficult from birth and have a demoralising effect on their parents; the latter experience an inability to interact with and to socialise their child adequately. A confrontation with the child is avoided or faced up to only sporadically, with inconclusive results or a humiliating retreat. Inevitably the parents lose confidence in their effectiveness as parents; they feel that the child is beyond their control and is manipulating them. They are also likely to be exhausted (there are usually sleeping problems) and in despair about their feelings of rejection and violence towards the child.

The significance of differences in temperament (or behavioural style) is underlined by research which demonstrates the releasing effect and initiating role exerted by the behaviour of the child on his parents (Bell, 1971; Schaffer and Emerson, 1964). The reciprocal interactions of parent and child are in a state of constant adjustment as each reinforces the other positively or negatively. Rewardingness or punitiveness, for example are not qualities inherent in the parent but are elicited in large part by a particular child and his behaviour. These are vital factors in the various learning situations encountered by the child (Herbert, 1978).

It is not, of course, a simple matter of some children being difficult and some easy. It is also a question of interaction with parental attributes. Although there are
some children whom nearly all parents would find rewarding and easy, and some who would pose problems to practically anyone, there are many whose characteristics lead to less consistent responses. Some parents like a lively, active, mischievous child but others may find him wearing and prefer a quieter, passive, inactive youngster. Accordingly, in assessing parent child interaction it is necessary to determine how each responds to the other and which attributes they find rewarding and which aggravating. These will not necessarily be the same in all families.

It seems clear that the stress resulting from a mismatch between the mother’s temperament (including her annoyance threshold) and the child’s behaviour style, sets the stage for discord, conflict, nervous exhaustion, and eventual feelings of inadequacy as a parent. Frustration, guilt, anger, rage, despair and worse are likely outcomes. The extreme instance of children affecting their parents is provided by evidence from studies of non-accidental injury, which seems to suggest that (in some cases at least) the deviance of the child may have been as relevant as the parental mismanagement in contributing to the abuse (Gil, 1970).

These concerns have led to efforts to develop ways of measuring sequences of parent-child interaction (see several chapters in Lewis and Rosenblum, 1974). It is not enough to measure, for example, how much the mother talks to her child; it is also necessary to determine the extent to
which she does so in response to cues from her infant. The characteristic of being able to 'read' babies' behaviour and interpret their communications is an important part of parenting (Bell and Ainsworth, 1972). Of course responsiveness is, in part, a function of parental characteristics but also it is likely to be influenced by the clarity and consistency of the signals provided by the child. These considerations were very much in the author's mind in the observing she carried out on the ward and in the child's home - during assessment and treatment.

TEMPERAMENT AND FAILURE-TO-THRIVE

Serious interactional problems have been found in failure-to-thrive children and their parents (especially mothers) in a few studies (Leonard et al. 1966; Pollitt and Chan, 1975, Pollitt and Eichler, 1976, Herbert and Iwaniec, 1979). These authors reported extreme (and maladaptive) maternal reactions to the rearing difficulties created by various behavioural styles in their children. There seems to be marked individual differences in coping behaviour. Active, vigorous, irritable, hypertonic, stubborn, demanding and aggressive children showed severe disturbances in relationships with their mothers with considerable fighting and anger especially in feeding situations. Their interaction was noisy, hostile, tense and often violent. Quiet, lethargic, withdrawn, undemanding children, were seldom interacted with. There
was little physical and emotional contact, they were often overlooked and ignored. They were described by their mothers as unrewarding, rejective; their interaction was passive, silent or indifferent. These researchers also reported examples of a 'temperamental mismatch' between mothers and children. (Some parents, exuberant and energetic themselves could cope with - and enjoy- an active, noisy baby, but not a passive, withdrawn one. A quiet rather passive mother might find the former rather 'off-putting').

What can reasonably be inferred from these studies is that children differ in their susceptibility to problem development as they grow older. It is not likely that any precise combination of temperamental characteristics per se leads to the appearance of a behaviour disorder; rather it is the interaction between these characteristics and the child's environment which eventuates in psychiatric referral. Parents faced with a temperamentally difficult child tend to find the task of socialising the child more exacting than the broad spectrum of parents; and they need to be more resourceful and patient than most (persistent and consistent with their resistant youngster) if they are to succeed in teaching their child to behave as they wish. From the earliest stage (see Stayton, et al.) the mother/infant interactions need to be positive and mutually rewarding through the process of reinforcing positively the child's desired behaviours and suppressing undesired behaviours, with the objective eventually of internalising
the child's moral and social codes and rules. Many parents with the best intentions may find themselves unable to be consistent and firm when faced with an unpredictable, intensely reacting, bad tempered child! Such children often seem to remain 'fixated' at an egocentric negativistic stage (see Herbert, 1978) usually associated with two and three year olds. The parents are often defeated by the strong-willed oppositional behaviour of their child. Confrontations with the child are often avoided or faced up to only sporadically, with inconclusive results or humiliating retreat. The parents then begin to lose confidence in their effectiveness as parents and feel that their child is beyond their control and beyond the possibility even of being lovable and loved (Herbert, 1978).

SUMMARY

The foregoing review of the literature on temperament raises several issues pertinent to the present investigation of failure-to-thrive:

1. The framework for this study is a 'social learning' approach to the interactional problems of children and their parents; it (in its turn) generates the functional analysis/assessment to be referred to on p.133a. Temperament is conceptualised as one of the more important organismic variables (O) in that form of assessment. It is shown in the
literature to be a significant moderating variable in the development of relationships between parent and child.

2. However, there is a more specific concern about temperament in the assessment of children who fail to thrive. It was the author’s impression, indeed growing conviction, as she gained experience in her day-to-day practice in a paediatric setting with such clients, that many of them displayed the constellation of attributes categorised as ‘difficult’ or ‘slow-to-warm up’ by Thomas, et al. (1959).

3. Their patterns of unmalleable behaviour, resistance to new routines and, indeed, other social ‘lessons’ and their general volatility of mood and behaviour, appeared to make them difficult to rear from early in life.

4. Feeding routines, and other training tasks, were made into fraught enterprises for many parents.

These observations generated a major hypothesis of this investigation: That failure-to-thrive cases would show a high proportion of difficult or slow-to-warm up patterns of temperament as compared with non-failure-to-thrive control subjects.
SECTION II

A CONCEPTUAL FRAMEWORK FOR ANALYSING

AND

TREATING FAILURE-TO-THRIVE
CHAPTER 5

SOCIAL LEARNING AS A FRAMEWORK FOR UNDERSTANDING FAILURE-TO-THRIVE

Failure-to-thrive is associated in the literature with a variety of behavioural and interactional (interpersonal) problems, as was pointed out in Chapter 1. Behavioural problems might be categorised into behavioural 'excesses' or behavioural 'deficits' (Kanfer and Saslow, 1969). Behaviour may be excessive in frequency, intensity, duration or because it occurs in inappropriate circumstances. Alternatively, it may be deficient in any of these respects. Both excess and deficit behaviours have been observed by various researchers in failure-to-thrive children (Pollitt and Eichler, 1976; Wolf et al. 1973; Powell et al. 1967; MacCarthy et al. 1970, MacCarthy, 1976; Fischoff et al. 1971).

Expressions of emotional and behavioural acts have certain allowable intensity levels, very high intensities - emotional responses of excessive magnitude - which have distressing consequences for other people, are likely to be regarded as signs of emotional disorder. There is an opposite extreme and it would apply to many of the failure-to-thrive children. A child may suffer not only
because he is, say, overactive, over aggressive or over eating, but because he is under-active, under-eating i.e. not eating enough for good health, or because certain inappropriate emotional responses are entirely absent from his repertoire. These emotional and behavioural deficits are frequently interpreted as symptoms or signs of emotional disturbance due to some form of environmental deprivation, lack of stimulation, social isolation, negative or scanty mother-child interactions and rejection (see MacCarthy, 1976; Fischoff et al. 1971; Leonard et al, 1966; Pollitt et al. 1976).

In order to understand the process of development of non-organic behaviour problems such as a feeding deficit (a kind of 'anorexia nervosa' of infancy) and to make reasonable predictions concerning the child's future behaviour and his well-being, a consistent theoretical framework is necessary. Such consistency requires a clear conceptualisation of what constitutes a psychological problem. A view put forward (Herbert, 1974, 1978) is that abnormal behaviour in children does not differ basically from normal behaviour in its development, its persistence and the way in which it can be changed. It is hypothesised that much of human behaviour is learned, maintained and regulated by its effects upon the natural environment and the feedback it gets with regard to these consequences. Behaviour occurs within a social context! It is a resultant of a complex transaction between the individual with his inborn strengths and weaknesses, acting
and reacting within a social environment which sometimes encourages and sometimes discourages his behaviour (Herbert 1981). The theoretical position adopted in this thesis is summarised in the proposition that many of the problems occurring in the failure-to-thrive syndrome manifested by young children, are the result of complex interactions of organismic factors (including biological influences) failures of learning, faulty socialisation patterns and dysfunctional interpersonal processes. Basically a social learning approach is adopted here, especially as it accommodates - as a conceptual framework - cognitive, affective and relationship variables (Herbert and Iwaniec, 1979).

A few principles of learning, serve to explain much of the human behaviour we observe every day. The basis of these principles is a body of experimental work dealing with the relationship between behaviour, the events that precede it, and the consequences that are generated by it. Consequences are also called rewards, reinforcements or punishments, depending upon their effects upon the behaviour. In learning theory the stress tends to be on overt behaviour, that is what we can observe the person doing and the settings, contexts in which he is doing it. Rewards and punishments and other events are mediated by human agents and within attachment systems and are not simply the impersonal consequences of behaviour. Problem behaviour may be analysed in terms of the way a person is responding to certain conditions. These might be an aspect
of his own physiological or psychological (symbolic) processes or features of his environment, including the behaviour of other people towards him. The problematic responses may be physiological, motor, perceptual, cognitive or emotional (Jehu et al. 1972). Such problematic responses may be regarded as a function of somatic factors, previous learning experiences and contemporary events.

Unfortunately in all forms of learning - the very process which helps the child adjust to life can, under certain circumstances, contribute to his maladjustment. An immature child who learns by imitating an adult is not necessarily to know when it is abnormal, deviant or prejudicial behaviour that is being modelled (say, an aversion to particular foods i.e. fads). The child who learns adaptively on the basis of classical and instrumental conditioning processes to avoid dangerous situations, can also learn in the same way (maladaptively) to avoid food, people caring for him, etc. If we accept the assumption that many worrying behaviours of childhood are acquired as a function of faulty learning, then there is a case for arguing that problems can most effectively be modified where they occur by intervening at the interface of the child’s process of socialisation - i.e., in the home - and in the light of the reinforcing contingencies supplied by the people around him. Psychological functioning involves a continuous reciprocal interaction (feedback) between behaviour and environmental controlling.
conditions. Although actions are regulated by their consequences, the controlling environment is in turn often significantly altered by the behaviour.

The way behaviour shapes the environment can be found even in simple experiments with infra-human subjects. As a means of studying the acquisition of avoidance responses Soloman (1964), devised a paradigm in which animals could postpone the occurrence of aversive shock by depressing a lever. Under these conditions some animals created for themselves and essentially punishment-free environment, whereas others, who for one reason or another, were slow in acquiring the requisite coping response, produced a highly aversive milieu. When response changes are selected as the data for analysis, then the environmental contingencies appear to be fixed controlling conditions; if instead, one analysed the data for the amount of aversive stimulation created by each subject, then the environment becomes the changeworthy event that may vary considerably for different subjects and at different times for the same subject.

Bandura (1969) points out that interpersonal situations provide much greater latitude for determining the contingencies that maintain one's behaviour. In social interchanges the behaviour of one person exerts some degree of control over the actions of others. For example, counter-actions drawn by hostile responses are likely to be quite different from those elicited by friendly ones. Rausch (1965) analysed sequential interchanges between
children which revealed that the immediately preceding stimulus (actions on the part of one person) was the major determinant of the other person's response. In approximately seventy-five percent of the instances, hostile behaviour elicited unfriendly responses, whereas cordial antecedent acts seldom did. Aggressive children thus created through their actions a hostile environment, whereas children who displayed friendly interpersonal modes of response generated an amicable social milieu. In the same way babies and children who are hard to feed and to care for may create an anxious or hostile response from their parents. Such considerations suggest that people far from being ruled by an imposing environment, play an active role in constructing their own reinforcement contingencies through their characteristic modes of response. They are proactive (even babies); not only reactive!

The theory of social interaction advanced by Thibaut and Kelly (1959) relies heavily upon the concept of mutual reinforcement contingencies. Research stimulated by this conceptualisation provides numerous demonstrations of how outcomes in dyadic interchanges are jointly determined by the behaviours of both participants. Bandura (1969) emphasises the fact that reciprocity is rarely perfect since one's behaviour is not the sole determinant of subsequent events. Furthermore, controlling and controllable events usually occur in an alternating pattern rather than concurrently until the interaction sequence is terminated. The reciprocal reinforcement process involved
in the unwitting production and strengthening of tantrums or demanding behaviour of children is easily understood by observing each sequence of interaction. On most occasions children's mild requests are not picked up because parents are preoccupied with other activities; if subsequent requests are not attended to the child will display more intense forms of behaviour which in turn will become increasingly aversive to the parents. At this point in the interactional sequence the child is exercising aversive control over the parents. Eventually the parent is forced to terminate the troublesome behaviour by attending to the child, thereby reinforcing this coercive style of behaviour.

Such differential reinforcement practices are highly effective in producing aversive forms of behaviour with unusual qualities of resistance. Thus, while nature's programming ensures that children's distress will not go unheeded for long, it also provides the basis for the establishment of socially 'disturbing' response patterns. Interpersonal difficulties are most likely to arise under conditions where a person has developed a narrow range of social responses, which periodically elicit reinforcing actions from others through aversive control, e.g. nagging, complaints, aggressive behaviour, helplessness, sick-role behaviour and emotional expressions of rejection, suffering and distress and other modes of responding that command attention.
Dynamic therapists refer to the latter as 'secondary gains'. It should be noted that the treatment strategies adopted are quite different depending on whether one views behaviour in terms of its functional value in controlling (inter-alia) the responsiveness of others or as a by-product of intrapsychic disturbances. Destructive reciprocal processes can be best eliminated - it is postulated - by withdrawing the reinforcement of the deviant/problematic behaviour and by hastening the development of more constructive means of securing desired reactions from others. Here then, is a guiding assumption to be tested in the therapeutic 'experiments' (viz casework) in this investigation.

COGNITIVE LEARNING

The point has been made that human behaviour is not totally determined by external events and that individuals can act to influence the course of their lives. The 'social learning' position holds that the great mental abilities of human beings allow them to exert more control over their destiny than is the case in animals, and more than some fundamentalist behaviourists would allow. An individual's interpretation of an event is thought to be the chief determinant of his or her reaction to that event. The social learning position maintains that taking cognitive and, indeed, affective (feeling) processes into account should improve prediction of people's behaviour over that possible from a description of environmental events alone.
This emphasis on reasoning and interpretation has led Mischel (1973) to term this approach a cognitive social learning conceptualisation of human behaviour. The approach is considered a social one because of its focus on interpersonal influences in the development of aggressive and helpful behaviour, sex-typing, observational learning and self-regulation. All of these processes typically involve more than one person, therefore they are social. Unlike psychoanalytic approaches the social learning formulation does not view personality as simply consisting of general traits (e.g. stinginess, hostility, dependence) or of opposing impulses and constraints within the mind. Social learning theories have emphasised the impact of current life events on the individual's behaviour. As people and circumstances change, the person's behavioural responses change. The person tailors his responses to the situation and does not always respond (say) aggressively, or cooperatively, assertively or passively. Of course the person's own skills and competence also affect what he can do, but behaviour (in this view) is determined largely by current factors and current attitudes (theories) which may have been shaped.

CAUSES OF DEVIANT BEHAVIOUR

Bandura (1968, 1969) has listed a number of ways in which lack of learning or faulty social learning could occur and could produce behaviour problems. In most cases a child's dysfuntional behaviour stems from more than one of the
following social learning processes:

1. Exposure to socially deviant models could teach the child inappropriate forms of behaviour.

2. Insufficient reinforcement could lead to the extinction of appropriate behaviours. The child might receive little attention or reward from harsh or neglectful parents. Such children may not be able to behave in a way that attracts social reinforcement from others and which may cause the child to become withdrawn and apathetic.

3. The child may receive inappropriate reinforcement for what is generally considered undesirable behaviour. Reinforcement of socially prohibited behaviours such as violent attacks, or refusal to comply with adults' instructions can teach children to behave inappropriately. In addition, parents alternately rewarding, punishing and ignoring the same types of the child's responses can prove confusing to the child. Such inconsistent handling fails to teach the child to discriminate how to behave in different circumstances in order to obtain reinforcement. Being confused, the child will behave inappropriately and perhaps violently.

4. Experiencing fear and anxiety either directly or observing it in other people can result in faulty respondent conditioning of negative emotional states.
The child might develop a persistent fear and anxiety of his mother whilst being fed, through being screamed at, forced to eat or hurt; or he might be alarmed by observing the mother’s anxiety and hostility at the feeding time. Through such negative emotional reactions associated with the presence of objectively harmless stimuli, these children can come to fear and avoid not only their mothers but also other people and situations. The list is virtually endless because nearly any unfamiliar object or event can accidently be paired with some other fear-provoking stimulus, making the child fear and avoid the unfamiliar stimulus.

5. Fictional reinforcement contingencies (Skinner’s superstitious behaviours) can exert great control over some people’s behaviour. Beliefs that household objects are dangerously contaminated by dirt can lead to compulsive cleaning and handwashing rituals, and many other irrational beliefs may be acquired through the teachings of other people or may be self-generated. These fictional reinforcement contingencies can be even more powerful than real external reinforcing conditions.

6. Faulty self-reinforcement can occur when people hold unrealistically high standards for themselves and remain chronically dissatisfied with their achievements. Such low self-efficiency expectations
may lead the child to stop trying to succeed since success seems impossible (Bandura, 1981).

Alternatively, some people have over-generous self-standards and are satisfied with nearly any form of their own behaviour whether lazy, heartless or illegal. Self-standards are learned from others through modelling and through direct reinforcement received from others for particular levels of performance ranging from minimal efforts to painstaking perfectionism. Inappropriately demanding or permissive families can instil unrealistic expectations and deviant self-reinforcement practices in children.

SELF-EFFICACY THEORY

Bandura's (1981) self-efficacy theory attempts to explain the mutual interactional influences of people’s self-perceptions and their behaviour. Self-efficacy is a belief in oneself, a conviction that one can produce positive outcomes through effort and persistence. People high in self-efficacy are convinced of their own effectiveness, those who are low in it believe that their efforts are doomed to failure. People with a history of failure in certain situations begin to believe that they cannot succeed. Their pessimism leads them to avoid their fear, and avoidance further handicaps them when they are forced to act, and a vicious cycle of fear and performance-failure is established.
Self-efficacy is particularly relevant to mothers of the failure-to-thrive children. Many researchers pointed out that lack of self-esteem, feelings of inadequacy as a parent, and helplessness are experienced by mothers of the failure-to-thrive children (Leonard et al. 1966, Pollitt et al. 1978).

If a psychological treatment can boost a client's perceived self-efficacy, then the client approaches formerly dreaded situations with new confidence. Heightened self-efficacy leads to more vigorous, persistent and probably more successful attempts to cope with the problem. Successful resolution of problems increases one's perceived self-effectiveness even further. Bandura offers four major sources of self-efficacy expectations: performance, accomplishments, modelling demonstrations, verbal persuasions and emotional arousal.

If a mother succeeds in eliminating or changing one problem behaviour in her child, then her expectations of further success should increase. If a shy child manages to join in with other children's activities, or to approach his feared mother when in difficulties, or if a toilet phobic child enters the toilet, then they have learned that they can perform a difficult task, their sense of competence is enhanced. Such self-observed success is the most potent and rewarding source of increased self-confidence.

Observing others succeed (vicarious success) can also boost
an insecure observer's self-confidence (a 'coping' model is more helpful than a 'mastery' model) but not as strongly as experiencing success directly. After all, the other person may be perceived as braver and more skilled than the observer could ever hope to be. Parents who fail miserably to manage their children tend to doubt their own skills until they have actually succeeded in performing a difficult task. Many forms of instruction and psychotherapy rely on verbal persuasion which lead to an even less convincing source of self-efficacy expectations. A social worker tries to reassure a tired, demoralised mother that a child will behave better when she changes her attitude towards him and when she begins to manage him correctly; when mother tries without precise guidance to perform effectively, then she may feel even more helpless than ever.

Attribution is a key factor in a social worker's intervention. If the client simply attributes beneficial change to the social worker or 'luck' rather than her own efforts (so called 'external locus of control') then therapeutic objectives have only partially been met and may not generalise over time.

Finally, the person's own emotional arousal can increase or undermine his expectations of success. A child who trembles at the thought of going to school, or facing his mother when he soils his pants, is less optimistic about his ability to stop soiling than is the calmer child.
observing the emotional states, we reach conclusions about our personal effectiveness. Extreme anxiety can interfere with many types of performance.

When anxiety is reduced, perhaps through relaxation training, tranquillisers or reassurance, then self-confidence should increase, and with it rises the possibility of success.

SUMMARY

This chapter includes a description of the social learning approach to children’s and (more importantly) interactional problems. The conceptual framework generates practice strategies for testing in the context of failure-to-thrive. Among the possibly fruitful concepts for translation and practice are:

1. Behavioural reduction of excess/surplus behaviours (e.g. extinction, desensitisation);

2. Behavioural remediation of deficit problems (the constructive approach);

3. Cognitive restructuring (e.g. changing attributions).


5. Self-efficacy (re-education, modelling).
Traditionally social workers are psychodynamically orientated and only in recent years has a growing interest been shown in 'behavioural casework' or 'behavioural social work'. In England much work in this field has been published by D. Jehu, M. Herbert, B. Sheldon and B. Hudson. The essential characteristic of this approach is an attempt to apply systematically certain principles established in experimental, social and developmental psychology to the explanation and modification of problem behaviour. The principles used may be derived from many areas of psychology (including learning, motivation, perception, cognition, attitude change and problem solving) and social casework (Fischer & Gochros 1975). These principles are deployed to amend and extend traditional casework methods so that the latter accord better with the available body of psychological knowledge, rather than simply to describe these methods in different language. Thus their application is priori rather than post facto (Jehu, 1972). Behavioural casework is an expanded form of behaviour modification which has been proved extremely useful in helping to resolve various behavioural, functional and interactional difficulties of the client. (Campbell, 1981; Herbert 1978; Herbert and Iwaniec, 1978,

BEHAVIOURAL CASEWORK WITH CHILDREN AND THEIR FAMILIES

The behavioural and interactional disorders of childhood and adulthood can be regarded in many instances (as we saw in Chapter 5) as consequences of faulty learning and/or socialisation (Herbert 1981). The intervention designed to remediate such problems is based on social learning theory and involves new training and sometimes retraining; in some cases or with regard to some problems (like failure-to-thrive) this intervention may constitute a relatively long-term endeavour. The goal of behavioural casework is not only about changing the undesirable behaviour of a 'problem child', it is also about altering and changing the behaviour and reactions of the parents—or other caregivers—and perhaps even the siblings (Herbert and Iwaniec, 1979). In the case of failure-to-thrive, maternal responses and reactions to the child are modified (ibid). Behavioural casework is a family orientated approach which combines behavioural methods of assessment and modification with family casework methods which include discussion, clarification of problem, developmental counselling, task-setting and support giving. This approach to social casework was developed (in part) at the Child Treatment Research Unit (CTRU) attached early on (in the 1970's) to the School of Social Work, and since the eighties in the Psychology Department of The University of
Leicester. The author trained in these methods and adapted them to hospital social work.

Much of the work with parents involves counselling. This aspect of the approach is informative in the sense of disseminating the knowledge we have of child development (e.g. what is normal or appropriate to the child's age, sex and level of ability) and of suggesting to parents what are reasonable expectations for their child. This transmission of information about normal child development and basic child needs for 'optimal' (hopefully) development, is often as important as suggestions about ways of dealing with worrying behaviour (see Herbert, 1980). In this approach it is assumed that the primary aim is to educate parents and it is hypothesised that the upbringing of children is itself a skill. The second aim involves exploring ideas and attitudes which undermine treatment. The third aim is to explore parent-to-child and child-to-parent relationships and interactions, and the factors within the family system that affect them adversely.

Not infrequently those difficulties between parent and children have contributed to the child's behaviour problems in the first place and get in the way of the parent's practical efforts to implement a programme. We have discussed how some children seem temperamentally resistant to socialisation and nurturing from birth (Herbert, 1978). Parents may have special sensitivities or anxieties with regard to this particular child which make it impossible or
difficult for them to be firm or consistent when he behaves in a certain manner. They lack the confidence to be intuitive, spontaneous or robust. They might feel when faced with a prolonged struggle to nurture the child, that they are rejected by him; and thus feel inadequate as parents and sometimes helpless. Such situations may create (in turn) a fraught and adverse emotional atmosphere for the child as a learning organism. High levels of arousal (anger, anxiety) on the part of the parents plus a common non-compliance in the child interact so as to disrupt his routines or even his socialisation. Parents often have fixed ideas about rearing children, which represents the standard of their parents or reactions against them. These matters may require discussion and a sympathetic hearing before the parents can sustain the modification of their own behaviour which (inter alia) is being required of them.

The behavioural approach has crucial implications not only for the way in which the social worker works, but also where she works. It affects the manner in which she listens to the mother's complaints about her child's behaviour and the methods by which she explores the specific details of the problem. Among the identifying features of the behavioural approach is a particular (although not exclusive) concern with present difficulties, a focus (whenever possible) on observable behaviour and interactions, and the specificity of the assessment process and the intervention which flows from it. Behavioural casework starts from a clear objective of producing change.
The assessment (in which the clients— and this term requires careful delineation— are closely involved) attempts to identify precisely what are the behaviours interactions to be changed.

The underlying assumptions about behaviour acquisition and change lead inexorably to the proposition that if most maladaptive behaviours of children and/or parents are acquired by processes of faulty learning, they can be most effectively changed by the therapeutic application of principles of learning to the clients in the natural environment in which their problems have developed. There is growing evidence that effective assessment and treatment of certain childhood disorders requires observation and intervention in the natural environment of the child, (Graziano, 1971; Herbert, 1978, 1980; O'Leary & O'Leary, 1976; Patterson, 1971; Tharp & Wetzel, 1969).

Treatment by office interviews or clinic based behaviour therapy raises the problem of how one is to achieve a generalisation of therapeutic change from the consulting room to the client's natural environment. Parents or other significant caregivers are the change agents; their relationship with the child is critical rather than that of the social worker.

THE TRIADIC MODEL OF THERAPY

In the conventional psychotherapeutic model, the
professional therapist interacts with the patient or client directly, and this is known as a dyadic interaction. The aim of this interaction is to alter attitudes or beliefs held by the client, or to provide insight into his actions, so that outside of the therapeutic situation altered behaviour patterns will occur. However, when an analysis following learning therapy is applied, it is usually apparent that any problem behaviours being presented by the client are often due to an interaction between the client and his environment. The therapist himself is not usually involved with the appearance of these problems, and, in fact, may never witness their occurrence. This is especially true with problem behaviours in difficult children, who often choose to be difficult when only out of sight of strangers. Therefore to produce behavioural changes in the client's life in general (that is, in the time not spent in a dyadic therapeutic interaction), a triadic model of intervention presented itself as an interesting and promising alternative (Tharp & Wetzel, 1969). In such a triadic model, the social worker becomes an advisor, consultant or teacher to the important people in the child's environment who are the real therapists or mediators of change (the parents or teachers). This model of treatment sounds plausible and simple, but can become very complex especially when the sources of imitation (models) and/or reinforcement (among the main processes producing change by the mediator) are not wholly in the hands of this change agent. This tends to be more of a technical problem with adolescents than children.
A full explanation of the triadic model can be found in Behaviour Modification in the Natural Environment, by Tharp and Wetzel (1969). They explain the basic form of this approach with this simple diagram:

![Triadic Model Diagram]

**THE CONSULTATIVE TRIAD**

The 'mediator' involved can be anyone who is involved with the client in everyday life, parents to child, husband to wife etc. Again, the target client can be any person presenting problem behaviours, in our cases generally mother and child. It could be said that the author of this thesis acts as the 'consultant' conveying information to the mediator to be used on the target child and target behaviours (perhaps her own children). Significant sources of reinforcement for the mediator are encouragement and recognition from the consultant, from her close interpersonal environment (for example, spouse, other children) and from the target child. A system of + and - signs can be applied to the mediator just as it is for the target child. And an overall + effect must be present for any appropriate mediating behaviour to continue. To quote from Tharp & Wetzel 'In the theoretical analysis, it becomes apparent that the central issue must become the maintenance of the mediator's desired behaviour. Since the
key agent for control is the mediator, the target's behaviour is a near-strict function of the effectiveness of the mediation. Therefore, behaviour modification in the natural environment stands or falls on the effectiveness of the behaviour of the mediator."
The effective training of parents to be 'therapists' for their own children and to be able to deal with their own problems, is the central theme in the type of therapy used in the present study. A conceptual framework for the behavioural casework approach to families based on (Herbert, 1981) is summarised below. Here is the kind of information we seek with the family's help (see Appendix VI and VII) for specific examples. See next page.

During the initial interview with the child and both parents (a crucial therapeutic configuration we have found in families where there are two parents), we explain who we are and how we work. It is policy to raise some of the major issues generated by a triadic behavioural approach: the concept of a genuine therapeutic partnership; our desire to share our knowledge and thinking with the parents, to take into account their own expertise based on longstanding knowledge of the child, and also to communicate the commitment we have to look at the ethical implications of any plans to institute changes within the family. This requires a role of advocacy on behalf of the child, and requires a good understanding of developmental norms and the social and psychological implications of behaviour change.

In all there are twenty assessment treatment steps (see Herbert, 1981). Table 6.1 shows the first six steps concerned with the preliminary screening.
Figure 5.1: General Assessment Guidelines

- General Assessment Guidelines
- Organismic Variables
- Behaviour
- Antecedent Events
- Proximal Antecedents
- Distal Antecedents
- Proximal Events
- Consequent Events

- Distal Outcomes
- Proximal Outcomes

- Parameters
- Diagnostic Implications
  - Social
  - Emotional
  - Personal
  - Ongoing Development
  - Learning
  - Sense/Meaning
  - Duration
  - Number
  - Frequency

- Health
- Achievement
- Self-concept
- Temperament
- Sex
- IQ
Table 6.1. Preliminary screening

- Step 1: Explain yourself and how you work
- Step 2: Identify the problems
- Step 3a: Construct a problem profile
- Step 3b: Define and refine specific target behaviours
- Step 4: Discover the desired outcomes
- Step 5: Identify the child’s assets
- Step 6: Establish problem priorities

It is stressed that the parents should be prepared not only to change their present responses to the child’s supposedly maladaptive behaviours, but also to initiate new behaviours provided that they are not required to do anything distasteful or contrary to their values as parents.

It is demonstrated how problems are not encapsulated within the child but are contingent upon things he has learned within a social context, including their own actions and reactions to him. We warn parents that we will require them to do a good deal of 'homework'; monitoring the child’s (and their own) behaviours along lines we will teach them. Some report that the act of recording tense situations provides a cooling-off interlude, time to think.

Table 6.2. contains steps seven to fifteen which are
worked through with the parents and child - the baseline phase.

Table 6.2 Baseline phase

Step 7 Specify situations
Step 8 Assess the extent and severity of the problem
Step 9 Provide client with appropriate recording material
Step 10a Find out more about the behaviour
Step 10b Find out how intense the behaviour is
Step 10c How many problems are being manifested by the child?
Step 10d Find out about the duration of the problem
Step 10e What sense or meaning is there in the problem behaviour?
Step 11 Assess the contingencies
Step 12 Identify reinforcers
Step 13 Assess organismic variables
Step 14a Arrive at a diagnostic decision
Step 14b Formulate objectives
Step 14c Draw up a verbal agreement or written contract
Step 15 Formulate explanatory hypotheses

In initiating baseline work our preliminary task is to specify precisely what the allegedly maladaptive behaviours and interactions are, defining them in terms of their frequency, intensity, number and duration, and the meaning (or sense) that they have for the child (FINDS) (Figure 5.1)
The analysis is very much (but not exclusively) focused on what is called the A,B,C, sequence. An analysis is made (by ourselves and the parents) of environmental conditions (and physical factors) leading up to, and immediately preceding the occurrence of the problem behaviour, and those that follow the performance of such behaviour. In this way we try to discover the antecedent stimuli (A) and consequences (C) which serve as eliciting or discriminative stimuli and thus trigger and maintain problem behaviour (B) in terms of learning and behaviour principles which will be understandable to the family.

During the early assessment period the key word is 'what'. The parent is taught to think sequentially and in terms of interacting systems. What is the child doing? What are other persons doing? Under what conditions in the family are these behaviours (or interactions) emitted? Parents tend to press for quick prescriptions and answers (which it is important to resist) to the fascinating questions 'how?' and 'why?'. Explanations of the need for painstaking data collection prior to formulating hypotheses are usually accepted.

One of the problems in triadic work concerns the reliability of parental (and in the case of self monitoring) child observations. We attempt to check on these recordings during home visits so as to enhance the confidence we place in the data base. It helps to write down the behaviour to be recorded (with symbols and
definitions) on large sheets of paper on the kitchen wall - as reminders to parents and/or child. The assessment of these events is directed towards the precise identification of antecedent, outcome, and symbolic conditions which control the problem behaviour. At all times the parent is encouraged to give descriptive examples (preferably recent ones) of the problems and confrontations in specific and observable terms; she is reminded to avoid inferential language such as 'he's aggressive' or 'she tries to get me down'. A technique used to tease out family interactions and target behaviours is the "typical day" in the life of the child and the family. It is worked through in minute details, pinpointing those areas which provide the times and places at which, and the persons whom, they occurred. It is helpful to find out (as diplomatically as possible) whether there is someone, say a granny, with whom the child does not display his eating (or other) problem. Parents tend to express their concern about their child's shortcomings as statements about problems and/or desired outcomes. Such initial comments about desired outcomes provide the raw material for the formulation (later) of more specific goals and objectives.

The literature on behaviour modification - as it applies to children's disorders - reflects a relative neglect of antecedent events. In their preoccupation with consequences of behaviour and, hence, operant procedures, behavioural caseworkers sometimes overlook environmental controlling stimuli and the possibilities of ameliorating and restructuring the child's environment - something
social workers are more inclined than psychologists to attend to.

Once a formulation of the problem is arrived at a detailed plan is made with the parents for intervention, which they initiate with much help. We work basically with a family system; the child is viewed as part of a complex network of interacting social systems any aspect of which may have a bearing on his present troubles. Thus in attempting to reach some kind of assessment and plan a programme of treatment the unit of attention is broadly conceived.

Table 6.3 describes Steps sixteen to twenty which concern the intervention and its eventual termination.

Table 6.3, Intervention and termination

Step 16a Plan treatment programme
Step 16b Take into account non-specific therapeutic factors.
Step 16c Assess the resources for treatment
Step 17 Work out the practicalities of the treatment programme.
Step 18 Evaluate the programme
Step 19 Initiate the programme
Step 20 Phase out and terminate treatment

There is no set intervention formula; there is a wide
choice of methods but their implementation and back up require sensitivity, ingenuity and creative social work skills.

SUMMARY

The behavioural casework approach adopted by the author and tested in this study of failure-to-thrive is described in its theoretical, formal (triadic applications) and content (stages of analysis and procedure) aspects.
Perhaps one of the major failures in the traditional approach to social casework is the reluctance to give parents—already demoralised—the practical advice of a highly specific nature, that they so badly need. As Berkowitz and Graziano (1972) elaborate the point:

The therapist rarely makes useful practical suggestions. He believes this to be of less importance than psychodynamic material and not knowing relevant environmental details, his suggestions may be so technical and general, that parents, teachers and even other therapists are unable to translate them into specific behaviour. Some parents overwhelmed and unable to cope with the demands of a disturbing child, receive little practical guidance from the therapist and find to ebbing of their feelings of helplessness, rage and literal hate. (p.298).

Over the past decade the systematic involvement of parents and particularly mothers in the psychological treatment of children has increased remarkably (Cone & Sloop, 1974; Enzer, 1975; Ferber et al. 1974; Ginsberg, 1976; Johnson & Katz, 1973; O'Leary et al. 1967; Patterson et al. 1975; Wahler et al. 1963).
A variety of therapeutic approaches has been used in training parents to help their own children; however a social learning or behavioural model has provided the main impetus for recent innovation. There are wide variations in terms of type and extent of parental involvement in work in the natural environment, ranging from carrying out simple instructions in contingency management (Williams, 1959) to a full involvement as 'therapist' in all aspects of observation, recording, programme planning and implementation; (Johnson & Brown, 1969). The teaching element might range from basic behavioural analysis and practice (Allen & Harris, 1966) to the mastery of general learning principles; (Howkins et al. 1966; Walder et al. 1969, 1972). In some cases the wider family and community are engaged in the therapeutic programme. For example, siblings have been enlisted to give a helping hand (Laviquer, 1976), as have peers: (Clement et al. 1976). and parent groups: (Herbert & Iwaniec, 1976). Children are also trained especially older ones to be their own 'behaviour therapists' (Clement, 1973), monitoring their own problems and using self control methods taught by the social worker.

Parents who abuse or neglect their children may lack positive child rearing skills, and, if so, training in these skills is indicated. A number of studies show that abusive parents interact with their children in a more positive, constructive manner after training in child
Sandler, 1980, Sandler et al. 1978; Wolfe et al. 1980). A training package consisting of many elements is used to increase skills. Components include asking parents to read relevant material; training parents how to pinpoint specific behaviours, and how to observe what happens just before and just after behaviours of concern; presentation by a model of effective and ineffective ways to interact with children; practice of skills; feedback concerning progress; assignments to be carried out at home.

Programmes are organised on a step-by-step basis – complex principles and skills being discussed and developed only after more elementary ones have been acquired. In some programmes, parents are offered rewards contingent on changes in their behaviour (e.g. Sandler et al. 1978). Training programmes differ in respect of the precise components used: e.g. what is read, how many rehearsal trials are offered, types of models presented, whether parents are first asked to describe how to use a procedure (after the principle is explained and model presented) before being requested to demonstrate use of it, and so on.

Sandler et al. (1978) trained a twenty-three year old mother referred to a community agency as an abusive parent to use more effective positive reinforcement practices with her four-year-old daughter. The specific aims of the programme were to increase the mother's use of approval and positive physical interactions with her daughter. Training was conducted over nine sessions. The mother was requested to complete assigned reading and review tests in Parents and
Teachers (Becker 1976) and to carry out suggestions in the text using weekly handouts that described specific child management practices. Incentives were offered to the mother for completing agreed upon tasks, such as free restaurant meals and movie passes donated by community business firms. Role-playing, in which the mother first played the part of the child and a social worker the part of the mother, was used to develop new skills. These roles were then reversed to give the mother practice in using new behaviours. Analysis of results showed a marked increase in the mother’s use of approval, and a decrease in the use of negative commands. These results were maintained over a five month follow up period.

Methods of training parents may differ along several dimensions, including the location of training (clinic or home); the means of instruction (assigned readings, programmed material, lectures, group discussions, films, direct training, model presentation, coaching, rehearsal and feedback in which the parents behaviour is systematically shaped); the participants who are present, (e.g. the parent alone, child and parent, parents, children, siblings, or a group of parents); the requirements made of the parents in terms of sophistication of learning behavioural principles, and the duration of intervention (Graziano, 1977).

Ideally, training should be carried out in the home since this decreases concern of the generalisation of new skills from an artificial setting, such as the social workers office, to the home.
Parents are often trained in a set of procedures, and it is hoped that training in these general principles will help family members to use these with other problems in the same or different situations. Factors influencing the selection of training format include: the age of the child; the perceived potential of the parent to learn new methods of child management via didactic instruction or training in the office; tolerance levels of parents and resources available to the worker. The focus of training has typically been on altering the behaviour of mothers although more recent efforts involve the father and the siblings. If the father is responsible for the abuse, then of course he would always be involved.

McAuley and McAuley (1977) report a case in which the mother has abused her six year old boy in which the father was involved in later stages of the programme. Three home sessions were held when the mother and her son returned home from a stay in an in-patient unit during which the father was coached how to use the new child management methods that the mother had learned. Agreements were made between the mother and father concerning child rearing responsibilities. The father agreed to be responsible for the child when his wife was preparing meals and certain other periods of the day. He also agreed to put the child to bed on two nights each week. The father received fifteen minutes toward an agreed night out with his friends for each successful bargaining episode. Each parent agreed
to fine the other a small amount for any failure to use appropriate contingency management procedures.

Training in some of the important components of effective reinforcement practices begins during the initial assessment stage when parents learn how to pinpoint specific behaviours they would like to change, learn to record the frequency of behaviours and to identify related antecedents and consequences. Ideally, they learn to use observation as their first reaction to a problem, that is, to collect information and to learn to recognise how their behaviour influences their children. During intervention, parents first learn how to use positive reinforcements to develop and maintain appropriate behaviours.

It cannot be assumed that significant others possess effective reinforcers. Such a repertoire may have to be established. Parents (like teachers) often claim to be reinforcing in their behaviour but observation shows them to lack the phrases of encouragement or they lack warmth or fail to make eye contact, and so on. Parents may then learn how to use time-out and extinction to decrease inappropriate behaviours. Training in the effective use of 'time-out' (see later discussion) is important since positive reinforcement of appropriate behaviour combined with ignoring of undesirable behaviours often fails to result in a change in a deviant child's behaviours. Use of time-out is combined with the positive reinforcement of appropriate behaviours. Audio-taped or video-taped
presentation of specific problems that may arise, for example, during the use of time-out, may be used to give parents practice in responding correctly in such situations (see for example, Wolfe et al. 1980).

Parents are instructed to use new procedures only with behaviours that have been carefully pinpointed during assessment. After successfully using new skills to alter these behaviours, other behaviours can be selected for change. Parents should receive training as necessary in more effective use of antecedents such as instructions and rules.

Learning how to shape new behaviours is an important skill for parents who find their offspring non-compliant, slow learners or, in other ways, resistant to socialisation. Instructions, model presentations, rehearsal, coaching and feedback are used to help parents learn these new skills. For example, in one behavioural programme (Ambrose et al. 1980), parents were asked to watch a videotape of a mother teaching her child, and were asked to identify what she did to make learning easier and more fun for her child. Additional teaching sessions were modelled for the parents, being sure to include numerous mistakes that could be corrected by the group members. Discussion, modelling, role-playing and video-taped feedback were employed to review and practice teaching skills.
A particular advantage of behavioural casework is that they seem to have 'face validity' for parents. There is no mystery surrounding the therapeutic process. They are familiar at a non-jargon level with the basic principles of learning - setting an example, providing examples and applying rewards and punishments in rearing their children. Howkins (1972) makes the point, with regard to training parents on behaviour modification, that it is not a simple matter of whether they will use behavioural techniques to manipulate their children. Rather the question is whether they will use these methods unconsciously with an unknown, unchosen and unhappy results or use them consciously, efficiently and consistently to develop the qualities they choose for their children.

**SHARING WITH PARENTS**

A behavioural caseworker sets out to share her thinking and information with parents. In doing this she indicates to them, at an early stage, that there could be disagreement over treatment objectives (reservations) on their part, or her part, about behaviours to be changed - the so-called 'target behaviours' of children and parents. Parents are made aware that a social worker must act as protector for a child, so there are (hopefully) no ill feelings about the role and main objectives of the intervention. Assessment and treatment planning is done on a mutual basis - to the satisfaction of both parties (if carried out properly).
Next a contract is drawn up.

A plan is made with the parents clarifying step-by-step the intervention, which they then initiate with a good deal of practical and moral support from the social worker.

BEHAVIOURAL CASEWORK WITH ABUSIVE, NEGLECTFUL AND REJECTING PARENTS.

The social worker attends, particularly, to contemporary events—the here and now—rather than delving far back (as a dominant concern) into the history of this child. This is not to say that historical factors are ignored! This strategy of focussing on specific and observable behaviours arise not from the naive belief that no aspects of a child's problem behaviour is determined by unobserved or unobservable factors (past or present), but from a conviction that a significant part of it is controlled by events—antecedent and consequences—that can be observed, measured and modified. As a tactic, it also has a particular appeal to parents who are struggling with current events and who cannot see the relevance of an unyielding concern with historical events. They know as well as any behaviour theorist that the social environment has a crucial role in shaping and maintaining human behaviour. What they often misunderstand is the precise working of the contingencies, their timing, their paradoxical effects and their potency. They do not often realise that their inappropriate reactions to the child
increase and strengthen the very behaviour they worry about.

Discussions of child abuse and neglect within a behavioural perspective have noted various factors that may be related to child abuse and neglect (e.g. Burgess, 1979; Hutchings, 1980; Dubanoski et al. 1978)

Five factors (inter alia) are commonly identified as requiring attention: lack of knowledge about normal developmental processes; punitive disciplinary methods; impulsive aggression, high stress levels and negative attitudes toward the child. Behavioural programmes focus on the involvement of the child's natural caretakers and upon creating changes in their behaviour.

A behavioural assessment should be broadly based. There may well be problems present that limit the potential of caregivers to become involved effectively in treatment programmes for their children. Problems such as depression and marital difficulties, then, are dealt with in their own right. The main characteristics of a behavioural intervention can be summarised as follows:

1. individual tailoring of intervention programmes based on information gathered during assessment; (2) clear description of intervention programmes; (3) tracking of possible changes; (4) an educational emphasis in which the social worker's role is one of helping clients learn new skills; (5) involvement of significant others; (6) a
constructional approach in which attention is devoted to building upon available client skills and constructing repertoires of behaviour, rather than on decreasing negative behaviours (Schwartz and Goldiamond, 1975); (7) an emphasis on the use of model presentation, rehearsal and feedback to develop new skills, and, (8) a concern with increasing client's self-management skills so that they can influence their environment more effectively. With a child-abuse related problem like failure-to-thrive a particular aim is (9) to protect and monitor the child's well-being.

It should be noted that an important ingredient in the use of behavioural methods includes the formation of a helping relationship with clients, encouraging positive expectations and interpreting the expectations of clients and responsibilities of social workers.

TREATMENT TECHNIQUES/METHODS

A wide range of behavioural methods has been used in work with parents who abuse and neglect their children as would be expected by the variety of concern presented by such parents. There has been an emphasis on training parents in more effective child rearing skills, sometimes a matter of getting them back on the spontaneous, confident track on which most parents find themselves after some trial-and-error. There are no formal courses in parenting.
Programmes developed have drawn on the rich material available in the behavioural literature concerning parent training (see for example Mash, Hamerlynck and Handy, 1976; Herbert, 1978; Kozloff, 1979) More recent studies report the use of cognitive-behavioural methods, such as problem solving and stress management training. This is not the place to provide a detailed account of behavioural methods; however, a brief description of some of the techniques found useful in this study, is provided.

**OPERANT CONDITIONING**

Treatment methods based on operant conditioning are those which attempt to control the outcome of certain behaviours through use of positive or negative reinforcers. A social worker using operant methods can analyse a family system and find out how the various members reinforce undesired behaviour in some members and intentionally or unintentionally ignore or punish desired behaviour. It is then possible to make alterations in such dysfunctional systems by planning with the family to systematically rearrange the consequences of behaviour so that all members of the family receive social reinforcement for desired behaviours.

**RESPONSE INCREMENT PROCEDURES**

(Increasing the frequencies of behaviour)
This is done mainly by the use of positive reinforcement, that is, giving a reward after appropriate behaviour, but negative reinforcement may also be employed at times.

Rewards

There are three main types of rewards:

(1) Social rewards - involving people

(2) Material rewards - involving tangible objects.

(3) Activity rewards - involving doing things.

These can be used to the exclusion of one another or in any combination.

Response Decrement Procedures

(a) Extinction

Extinction refers to the process by which the reward has been maintaining a behaviour is withheld immediately after the occurrence, that is, contingent withdrawal which puts the behaviour on to what is called extinction schedule of the behaviour. One has therefore to know exactly what the reward is, and be in the position to withhold this whenever necessary. If this is possible then behaviour will gradually decrease in frequency and finally extinguish, that is the frequency will become zero.
The length of time this takes however depends on two factors - what schedule of reinforcement the behaviour was on before (Reese, 1966), and how efficiently the rewards can be withheld now. As mentioned earlier, behaviours being maintained on a partial schedule of reinforcement are fairly resistant to extinction, because the behaviour occurs quite often without being rewarded anyway. It can therefore take a long time for such behaviour to fade. If, however, the behaviour has previously been on a continuous schedule of reinforcement, the change to an extinction schedule is obvious and the behaviour will disappear more rapidly when reinforcement is not forthcoming. In the former case the rate of extinction, that is the speed with which the behaviour decreases in frequency, may be very slow and may not be of much use in a treatment programme when an undesired behaviour is a hindrance to the rest of the programme.

The efficiency of withholding rewards during an extinction schedule is also of great importance - again because any giving of reward inadvertently puts the behaviour on to a partial schedule of reinforcement which acts against the extinction process. This is made more likely because of an effect which often occurs at the beginning of an extinction procedure - that is, the frequency of the behaviour may initially increase before it starts to decrease (Sulzer et al., 1968). This seems to be a kind of testing out phase and all rewards must be withheld during this time if the behaviour is not to be actually made worse (by being
rewarded for increased intensity or frequency).

If these factors are known and consideration is taken of them, then the extinction procedure can be very effective, Williams, (1959). Such a procedure is of the most use with behaviours which can be allowed to continue because they are not injurious to anyone involved, for example, crying tantrums, low intensity fighting behaviour, pestering and which do not seem to have intrinsic rewarding properties. Behaviours which may therefore not be suitable are - serious fighting, defiance (if the child is continuing with chosen activities), destruction of objects, fire-setting, etc. In such behaviours extinction may work if the rewards from others are much more important than any intrinsic rewarding properties, but it is usually only possible to tell this by empirical test, that is by starting an extinction process.

Also if it is likely that any escalation of such already difficult behaviours could not be tolerated to any extent then extinction may not be a possible treatment choice.

In such circumstances, a process which also involved a mild punishing event combined with withholding rewards may be of more use. This is known as time out.
(b) Time-Out

The full name of this process is 'time out from positive reinforcement' by the way in which it differs from extinction is that no positive reinforcement is available for any behaviour as long as the time out is in effect. This is usually obtained by isolating the child so that any rewards from other people are withheld completely. It is this isolation from other people (often from his normal behaviour) that appears to have punishing effect for a majority of children—especially for those known to be attention seeking.

This therefore overcomes the fact that a pure extinction process leaves the child in his normal environment continuing with whatever behaviour he wishes to engage in which he may find very reinforcing, for example, if a child is ignored for being defiant he may then continue to watch television which he enjoys greatly, and this therefore reinforces his defiance.

(c) Response Cost

A combination of withholding rewards and giving a punishment occurs in the procedure known as response cost. This involves taking something valued from the child as a consequence for engaging in an inappropriate behaviour whilst being careful to also withhold any other possible rewards.
which were previously maintaining the behaviour (see Kazdin, 1972). Things which can be removed immediately can be privileges, for example, switching the television off, taking the child home immediately if outside, or something which the child possesses or wants, for example, toys for a certain length of time, or removing a meal. If the child is collecting tokens, a set number of these may be removed, or a reward written into a contract maybe forfeited (for example, Phillips et al. 1981). As far as possible this is done in a calm, unemotional way and pleading from the child for it not to happen is ignored. If necessary a time out may be instituted if the child begins to object strongly and often a response cost can be added to the use of time out to enhance the effectiveness of this.

REDUCTION OF FEAR AND ANXIETY DESENSITISATION

Perhaps the most extensively researched of the behavioural techniques is systematic desensitisation developed by Wolpe (1973) and based on positive counter-conditioning. In its classic form this method of treatment involves teaching the child (or parent) relaxation and then gradually taking him/her through a hierarchy of anxiety provoking images, gradually approaching the full phobic situation. At each stage in the hierarchy the client is encouraged to use relaxation to compete with any fear reaction, until eventually the phobia is overcome. In some cases the hierarchy is experienced 'in vivo' rather than in imagination. Although systematic desensitisation has been
used mainly in treatment of phobias, the underlying principles are very relevant to good social work interviewing techniques. Fischer and Gochros (1975) suggest that if social workers are warm, sympathetic and concerned about client’s problems and optimistic about their solution and give an impression of reliability and competence, then their clients are likely to react with feelings of confidence and increased self-esteem, which will help counter anxiety, guilt or self-devaluation. This treatment is highly relevant to rejective and hostile mothers, by bringing them closer to their children step by step. People who avoid each other cannot get to know (and like) each other! Relaxation training has also been used to help parents to manage their anxiety at times when they were unsure of how to handle their child (e.g. feeding him). They are instructed to leave the situation, to relax, and to reconsider the problem and then try to deal with it.

Some behavioural programmes have focussed on decreasing inappropriate anxiety reactions. For example, Sanders (1978) trained abusive parents in relaxation methods and used systematic desensitisation to decrease inappropriate reactions to his infants’s crying. Some infants have unusually aversive cries. Already strained parenting skills may have to be supported by increasing tolerance for such crying by a procedure such as systematic desensitisation.
MODELLING

Modelling, a treatment developed from discoveries about observational learning (Bandura and Walters, 1963) is a procedure social workers often use without associating it with behaviour modification. Clients are frequently paired with a social worker who, it is felt, may provide a suitable model of masculine or feminine behaviour especially when no such appropriate model exists in the client's own environment. This informal use of modelling can be effective, but more systematic use of such procedures as role-playing could be very valuable in teaching clients social skills in such areas as assertive training.

Modelling with reinforced practice has been used as a technique to decrease anxiety in the presence of a child. For example, Gilbert, (1976) reported the case of a thirty year old parent who had an extreme aversion toward her first child, Sarah, aged four. She was afraid that she would harm Sarah and could not touch her. Kathleen (the parent) resented giving up her job when her first child (Sarah) was born and became depressed shortly after her birth. She started to smack Sarah and shout at her.

Modelling and reinforced practice was carried out in the home. Behaviours that the mother would like to have shown but could not, included talking to Sarah, praising Sarah, smiling at Sarah, sitting next to her, picking her up, kissing her, cuddling her and hearing Sarah’s voice.
These are given in the order of the anxiety they elicited, ranging from a low to high level. The mother was asked to copy the behaviour illustrated by the therapist, which included engaging in games requiring contact and intimacy.

**ASSERTIVE TRAINING**

Assertive training has been successfully used in the treatment of impulsive and self-defeating aggressive behaviour — commonly the defensive reaction of a person who does not have sufficient skill or confidence to assert herself in a more appropriate way. The use of groups in assertive training and social skills training has also been found to be successful in dealing with timid and withdrawn clients.

Parents and children may lack skill in listening and talking to each other. Inappropriate or inadequate behaviour in social settings may be due to a number of factors, including lack of effective skills, interfering emotional reactions such as anger or anxiety, or inappropriate discrimination in using skills. Some people may simply not enjoy interactions with other people, and so avoid these. If clients do lack effective social skills, then social skills training may be helpful in establishing these.

Jeffrey (1976) used communication training to increase the interaction between a mother and her five year old child.
who was abused and emotionally deprived, and whose speech was severely regressed. Observation during baseline monitoring indicted that they communicated very little with each other. The mother spoke to her boy two percent of the time they were together, and her statements consisted of shouted commands such as 'sit' or 'out'. The child talked to his mother only six percent of the time. Model presentation, cueing, practice and feedback were used to increase talking and listening to each other, including expanding on what was said. A shared reward was offered if the mother talked to her boy for thirty percent of the fifteen minute session, and if he spoke to her fifty percent of the time. This encouraged each to prompt and maintain the conversation of the other. Amount of time that the mother and child spoke to each other was recorded on a graph so all could see what was happening. A few weeks after the training sessions were completed, observation of their interaction indicated that the mother now spoke twenty-one percent of the time and the child thirty percent of the time. Communication training has been used in other studies as well (Stein et al., 1978; McAuley and McAuley, 1977; Polakow and Peabody, 1975). There is an extensive literature on assertion training from which practitioners can draw (see for example Bellak and Hersen 1979).

**SELF CONTROL**

Some of the most interesting recent developments in
behaviour modification have been in the area of self control procedures. These are designed to give the subject a more effective means of manipulating the eliciting, reinforcing and discriminative stimuli which affect his behaviour. The caseworkers role is first to examine carefully the antecedents and consequences of a piece of behaviour over which the subject wishes to have more control and then to suggest ways in which these events may be altered. They may have altered by either physical or cognitive changes in order that the subject may achieve a greater degree of control over his behaviour. For example, learn to control overeating, anger, drinking etc.

Experiencing anger toward one's children is a natural part of being a parent. This is illustrated in a recent study of one hundred and eleven parents in Cardiff, Wales, exploring how frequently they felt angry towards their children, what they did (if anything) to control this and what situations seemed to precipitate their reactions (Frude and Goss, 1979). Hitting children in anger was common. Behaviours that triggered anger included irritating behaviour, defiance, cost involved (e.g. breaking a valued object), or danger (e.g. setting a fire). Parents often reported that a stress-inducing event such as a hectic shopping trip, had occurred prior to the incident. Eighty four parents said that there had been times when they had stopped themselves from losing their temper with their children. Control methods they used included counting to ten, deep breathing, leaving the scene and
doing something else, such as having a cup of tea. Some said that they had altered their appraisal of their child’s behaviour by reframing the situation so as to view the child sympathetically. For example, one parent reminded herself of scriptural references on how to raise children and how to have a happy life. Another recalled moments from a happy holiday. These parents used a variety of cognitive and overt coping skills to influence their emotional reactions. Parents who abuse and neglect their children may not possess such coping skills.

Novaco (1975) developed a stress management training programme to offer people skills in managing provocations and in regulating their anger arousal, based on a similar programme developed for anxiety reduction (see Meichenbaum, 1977). Components of this programme include a situational analysis (identification of situations that provoke anger, and thoughts and feelings in anger-inducing encounters) and encouragement to use self-statements and feelings associated with anger as cues for positive coping strategies. Clients are encouraged to reconceptualise anger as a state which is aggravated by self-presented thought and to view arousal as a series of stages rather than as an all or nothing state. Attention may be devoted to identifying and altering irrational beliefs (e.g. that people should never make mistakes). Coping strategies include use of self-instructions to reduce arousal when this is identified. Types of self-instructions that may be used include those that encourage a focus of the tasks
to be accomplished (e.g. "What is it I have to do here?") and those that encourage another incompatible behaviour such as getting a cup of tea or relaxing (e.g. "just relax" or "take a deep breath"). Clients are encouraged to use coping skills early in a chain of behaviour and to offer self-reinforcement for success. Denicola and Sandler (1980) combined "coping skills training" with parent child training.

COVERT SENSITISATION

Covert sensitization was developed by Cautela (1967). It involves teaching a subject to obtain a clear visual image of an aversive situation or experience and to conjure up this image when trying to avoid temptation.

Parental alcohol abuse can be a contributing factor to child abuse or neglect; it was the problem in a number of cases in the Almeda project (Stein et al., 1978). For example, in one case the father had been drinking when he severely abused one of his children. Intervention focused on decreasing alcohol consumption, increasing the completion of household jobs by the children and increasing the mother's free time. One of the factors related to drinking was the general disorganisation of the household (see Stein and Gambril, 1976; Stein et al., 1978).
PROBLEM SOLVING

The aim of this training is to offer clients a general coping strategy. Problems are recognised as a normal part of everyday life and the assumption is encouraged that something can be done about them. Clients are trained to identify feelings or thoughts that may accompany a problem so that these can be used as cues to initiate problem solving.

The importance of clearly defining problems is emphasised, including details that make a situation problematic. Additional steps in problem solving include generation of alternatives for solving the problem, and a review of the advantages and disadvantages of each. The last step involves trying out the solution and seeing what happens. If faulty problem-solving skills are present, the exact nature of these should be determined before starting training. Model presentation, practice and feedback are typically used to develop new skills. Denicola and Sandler (1980) trained parents in problem solving skills.

THE USE OF WRITTEN CONTRACTS

Written contracts between the social worker and the natural parents and between clients, have been used in many behavioural programmes designed to decrease child abuse and neglect (e.g. Stein et al., 1974, 1978; Jeffrey, 1976; Reavley and Gilbert, 1976; Reavlet et al., 1978; Hutchings,
For example in the Alameda Project (Stein et al., 1978; Stein and Gambrill, 1976; Sheldon 1982) formation of a written contract between the natural parents, the child (dependent on age), and the social worker was a routine part of practice. Contracts clarify agreements between two or more parties and discourage vague expectations. The contract in the Alameda Project identified the parent’s goal (such as the return of a child to her care); the objectives that would have to be achieved to attain this goal; the consequences that would occur dependent on whether objectives were met; the time limit involved (usually six months); the responsibilities of the parents and the social worker and the signatures of involved parties. All involved parties should participate in formation of the contracts and entries are made on contracts only with the agreement of all participants. Copies of the contract as well as written descriptions of intervention plans were given to clients. These served as helpful reminders of agreements made. Hutchings (1980b) recommends keeping client records in their homes to facilitate communication among the many professionals who may be involved with a given family.

SUMMARY

To summarise, it is being suggested (and this study attempts to substantiate the suggestion) that behavioural methods like the ones outlined in this chapter, provide a valuable tool for social workers seeking to increase the
positive interactions of depressed and/or rejecting parents, of fearful or resistant children, those refusing to eat or unable to eat - indeed to mitigate a wide range of problems they are faced with and are expected to resolve. (More strictly speaking they try to assist their clients to actively resolve their own problems). There is much empirical evidence of the effectiveness of behavioural methods in bringing about positive changes in the child's and family life. Sadly, it has not been adopted on a large scale by the social work profession (see Sheldon, 1982).
The current behavioural literature reflects the beginning of the idea of an integrative approach to child maltreatment, within which attention is paid to individual, family, community and societal factors.

Available reports indicate that a behavioural approach is indeed a promising one to pursue. It offers some unique advantages, such as an emphasis on the identification of specific, desired outcomes, continuous evaluation of progress; using clear descriptions of assessment and intervention procedures; and the achievement (in an encouraging number of cases) of positive results in a short time (Herbert, 1978). These factors make it easier to reach difficult decisions concerning children and their families - whether the former should be in care or be treated at home. They can encourage and clarify communication between the many professionals normally involved. In addition, a behavioural approach offers the advantage of building upon available client skills.
The approach has given rise to the development of helpful training aids, and to the use of paraprofessionals to carry out selected aspects of intervention programmes. The assumption that the maintenance of positive changes must be planned for, rather than just hoped for, increases the likelihood that attention will be devoted to this important phase of intervention. Recognition of the importance of understanding relationships between specific behaviours of concern, and what happens immediately before and after their performance, has yielded valuable information about patterns of interaction in abusive, neglectful and in normal families. Another promising direction within the behavioural literature which has not yet been taken full advantage of by workers in the field of child abuse and neglect, is that of social skills training to help parents increase their range of social contacts.
SECTION III

AN EXPERIMENTAL

AND "ACTION RESEARCH"

INVESTIGATION OF THE

PROBLEM

FAILURE-TO-THRIVE
CHAPTER 8A

ORGANISATION OF THE INVESTIGATION:

GROUP ASSESSMENTS AND COMPARISONS

THE INVESTIGATION

This study was cross sectional in the sense that all the subjects (clients) were studied and compared on several tests/questions at one moment in time, but longitudinal also in the sense that each subject was investigated over a period of time. The idiographic case-history approach was utilised, and in addition, a typical A B C intrasubject experimental design (N=1) for evaluating treatment change. The latter is detailed later in the chapter.

Nomothetic/Comparative Study of Index (Experimental) Group and two Control Groups.

Subjects:

Seventeen non-organic failure-to-thrive children (index group) and two control groups were studied, treated and followed up over a four year period. Index patients were referred to the Leicestershire Division of Paediatrics for physiological and laboratory investigation and to the author for psychosocial and social assessment and treatment.
All children were sent to hospital to exclude any organic causes of failure-to-thrive, to observe behaviour patterns, including feeding style, attachment behaviour, maternal handling and general social responsiveness to the environment. All children were observed by nurses, especially nursery nurses, paediatricians and the social worker (researcher). Feeding and weight were carefully recorded. All children were followed up in outpatients clinics by paediatricians and the researcher until the weight gain and general emotional well being of the child were felt to be satisfactory.

Index Group
The criteria for admission into the study were (a) child's weight significantly below the expected standards on the growth and development chart;* (b) a history of weight loss or inadequate weight gain had to be present; (c) all children within the group had extensive medical investigations to exclude malabsorbtive, infective, endocrine, metabolic chromosomal, neoplastic and skeletal causes of failure-to-thrive. To the referring paediatricians they were cases of "failure-to-thrive without organic cause".

The index group consisted of nine boys and eight girls. Mean age: twenty seven months. The mean age of the mothers was twenty five years.

*In most cases this meant the third percentile or below.
Control Group A

The children in this group had been newly diagnosed to have the following disorders: coeliac disease (4); cystic fibrosis (3); liver disease (2); congenital heart disease (3); milk allergy (3); major structural congenital abnormalities (2). Control Group A consisted of ten boys and seven girls. Mean age: eighteen months. The mean age of the mothers was twentyseven years.

Control Group B *

The children in this group had been selected serially from the hospital admission records. Age, sex and social class matched with children of the index group. The reasons for admission to hospital were: road accident (2); convulsions (5); pneumonia (3); respiratory tract infection (4); chronic constipation (2). Control Group B consisted of nine boys and eight girls, mean age; twenty seven months. The mean age of the mothers was twentyseven years.

*Footnote:

In a sense and with regard to eating and thriving this is a 'normal' control group. None had worrying eating or growth problems.
<table>
<thead>
<tr>
<th>GROUP 1</th>
<th>GROUP 2</th>
<th>GROUP 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>months</td>
<td>No:</td>
<td>%</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>12</td>
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<tr>
<td>17</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>21</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>24</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>29</td>
<td>1</td>
<td>6</td>
</tr>
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<td>39</td>
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<td>6</td>
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<td>1</td>
<td>6</td>
</tr>
<tr>
<td>45</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>60</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>72</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Mean = 27.4</td>
<td>Mean = 18.0</td>
<td>Mean = 27.4</td>
</tr>
<tr>
<td>Median = 23.7</td>
<td>Median = 12.3</td>
<td>Median = 23.7</td>
</tr>
<tr>
<td>STD.DEV = 13.7</td>
<td>STD.DEV = 13.7</td>
<td>STD.DEV = 20.2</td>
</tr>
</tbody>
</table>
TABLE 9.2 SEX DISTRIBUTION

<table>
<thead>
<tr>
<th></th>
<th>BOYS</th>
<th>GIRLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index Group</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Group A</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Group B</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>

METHODS

The three groups were compared using the information derived from:

A. TESTS: Eysenck Personality Inventory (Eysenck, 1960)
   16 Personality Factor (Cattell, 1941)
   Spielberger Anxiety Inventory (Spielberger, 1970)

B. STRUCTURED INTERVIEWS: (see Appendix I, II for Coding Criteria, etc.)
   - Temperament (based on Carey, 1972)
   - Child Rearing (based on modified questionnaire of Sears et al. 1957)
   - Developmental Data ) questions devised by
   - Attachment behaviour ) the author
   - Demographic Data ) questions devised by
   - Social History ) the author

C. DIRECT OBSERVATIONS

D. BEHAVIOURAL ASSESSMENT AND INTERVENTION
A. PERSONALITY TESTS

(i) Eysenck Personality Inventory

The Eysenck Personality Inventory (EPI) is a development of the Maudsley Personality Inventory (MPI). Like the parent instrument, it sets out to measure two major dimensions of personality, extraversion and neuroticism. The EPI also contains a lie scale which may be used to eliminate subjects showing 'desirability response set'; no such scale was contained in the published form of the MPI. The retest reliability of the EPI is somewhat higher than that of the MPI, even after periods of several months it is still in excess of 0.85.

Direct evidence is available of the validity of the EPI as a descriptive instrument of the behaviour manifestations of personality; it appears to be satisfactory (see Manual). A review of the literature by Eysenck (1960) has disclosed strong support for a view which recognises the existence of two very clearly marked and outstandingly important dimensions; these have been called respectively; Extraversion and Neuroticism, emotionality or stability-instability. Below is given a brief account of the 'typical extrovert' and the 'typical introvert'. These may be regarded as idealised end-points of a continuum to which real people may approach to a greater or lesser degree.

The typical extrovert is sociable, likes parties, has many friends, needs to have people to talk to, and does not like reading or studying by himself. He craves excitement, takes
chances, often sticks his neck out, acts on the spur of the moment, and is generally an impulsive individual. He is fond of practical jokes, always has a ready answer and generally likes change. He is carefree, easy-going, optimistic and likes to "laugh and be merry". He prefers to keep moving and doing things, tends to be aggressive and loses his temper quickly, altogether his feelings are not kept under tight control, and he is not always a reliable person.

The typical introvert is a quiet retiring sort of person, introspective, fond of books rather than people. He is reserved and distant, except to intimate friends. He tends to plan ahead, "looks before he leaps" and distrusts the impulse of the moment. He does not like excitement, takes matters of everyday life with proper seriousness and likes a well ordered mode of life. He keeps his feelings under close control, seldom behaves in an aggressive manner and does not lose his temper easily. He is reliable, somewhat pessimistic, and places great value of ethical standards.

(iii) Cattell 16 Personality Factors:

The personality factors measured by the 16PF are just not unique to the test but instead rest within the context of a general theory of personality. Nearly ten years of empirical factor-analytic research preceded the first commercial publications of the test in 1949. The sixteen dimensions or scales are essentially independent; they are specified in the following table.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Low Sten Score Description (1-3)</th>
<th>High Sten Score Description (8-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Reserved, detached, critical</td>
<td>Outgoing warmhearted</td>
</tr>
<tr>
<td></td>
<td>Aloof, stiff. Szothymia</td>
<td>easygoing, participating</td>
</tr>
<tr>
<td>B</td>
<td>Dull</td>
<td>Bright</td>
</tr>
<tr>
<td></td>
<td>Low intelligence</td>
<td>High Intelligence</td>
</tr>
<tr>
<td>C</td>
<td>Affected by feelings</td>
<td>Emotionally stable, mature</td>
</tr>
<tr>
<td></td>
<td>emotionally less stable</td>
<td>Faces reality,</td>
</tr>
<tr>
<td></td>
<td>Easily upset, changeable</td>
<td>calm</td>
</tr>
<tr>
<td></td>
<td>Lower ego strength</td>
<td>Higher ego strength</td>
</tr>
<tr>
<td>E</td>
<td>Humble, mild, easily led,</td>
<td>Assertive, aggressive</td>
</tr>
<tr>
<td></td>
<td>docile, accommodating</td>
<td>competitive, stubborn</td>
</tr>
<tr>
<td></td>
<td>Submissiveness</td>
<td>Dominance</td>
</tr>
<tr>
<td>F</td>
<td>Sober, taciturn serious</td>
<td>Happy-go-lucky</td>
</tr>
<tr>
<td></td>
<td>Desurgency</td>
<td>enthusiastic</td>
</tr>
<tr>
<td>Factor</td>
<td>Low Sten Score Description (1-3)</td>
<td>High Sten Score Description (8-10)</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>M</td>
<td>Practical, &quot;down-to-earth concerns&quot;</td>
<td>Imaginative, bohemian absent-minded</td>
</tr>
<tr>
<td></td>
<td>Praxernia</td>
<td>Autia</td>
</tr>
<tr>
<td>N</td>
<td>Forthright, unpretentious genuine but socially clumsy</td>
<td>Astute, polished, socially aware</td>
</tr>
<tr>
<td></td>
<td>Artlessness</td>
<td>Shrewdness</td>
</tr>
</tbody>
</table>

- **G** Expedient, disregards rules; Weaker superego strength
- **H** Shy, timid, threat-sensitive; Threctia
- **I** Tough-minded, self-reliant, realistic; Harria
- **L** Trusting, accepting conditions; Alaxia
- **Conscientious, persistent moralistic, staid**
- **Stronger superego strength**
- **Venturesome, uninhibited, socially bold**
- **Parmia**
- **Tender-minded, sensitive overprotected**
- **Premsia**
- **Suspicious, hard to fool**
- **Protension**
| 0 | Self-assured, placid, secure, complacent, serene | Apprehensive, self-reproaching, insecure, worrying, troubled |
|   | Untroubled adequacy | Guilt proneness |
| 01 | Conservative, respecting traditional ideas | Experimenting, liberal thinking |
|   | Conservatism of temperament | Radicalism |
| 02 | Group dependent, a 'joiner' and sound follower | Self-sufficient resourceful, prefers own decisions |
|   | Group adherence | |
| 03 | Undisciplined self-conflict lax, follows own urges, careless of social rules | Controlled, exacting will power, socially precise compulsive following self image |
|   | Low self-sentiment integration | High strength of self sentiment |
| 04 | Relaxed, tranquil, torpid, unfraustrated, composed | Tense, fraustrated, overwrought |
|   | Low ergic tension | High ergic tension |

The reliability and validity of the test are satisfactory (see Manual). The 16PF can be scored for broad order factors as well.
as for the sixteen primaries. Eight second-order factors have been identified and replicated at the present time. The first four, which are generally of most interest to practitioners are:

QI  Introversion versus Extraversion
QII Low anxiety versus High anxiety
QIII Tenderminded emotionality versus Tough poise
QIV Subduedness versus Independence

(iii) State-trait Anxiety Inventory (Spielberger, 1970)

The state-trait anxiety inventory (STAI) is comprised of separate self-report scales for measuring two distinct anxiety concepts: state anxiety (A-State) and trait anxiety (A-Trait). The STAI-A-Trait scale consists of 20 statements that ask people to describe how they generally feel. The A-State scale also consists of 20 statements but the instructions require subjects to indicate how they feel at a particular moment of time. State anxiety (A-state) is conceptionalised as a transitory emotional state or condition of the human organism that is characterised by subjective perceived feelings and tension and apprehension, and heightened autonomic nervous system activity. A-States may vary in intensity and fluctuate over time.

Trait anxiety (A-trait) refers to relatively stable individual differences in anxiety proneness, that is, to difference between people in the tendency to respond to situations perceived as threatening with elevations in A-State intensity.
The test-retest correlations for the A-Trait scale are reasonably high ranging from .73 to .86 whilst those for the A-State scale are relatively low ranging from .16 to .54, with a median $r$ of only .32 for the six subgroups. The low $r$'s for the A-State scale was anticipated of course because a valid measure of A-State should reflect the influence of unique situational factors existing at the time of testing.

3. STRUCTURED INTERVIEWS

(i) Child Temperament

Carey's infant temperamental questionnaire (Carey 1972) is directly based on the New York Longitudinal study protocol of Thomas et al. (1968). Carey devised a simple and easy to score questionnaire for infants from four to eight months of age. By using the material directly from the New York Longitudinal Study interview protocol he set up a multiple choice questionnaire with seventy items in the nine categories of reactivity, activity; rhythmicity, approach-withdrawal; adaptability; intensity of mood; persistence; distractability and threshold.

The total ratings in each category were 'collapsed' for our purposes to discriminate between low, medium and high categories.
The questionnaire is designed to measure three major temperamental characteristics in children: easy, difficult and slow to warm up (see Chapter 4). Direct evidence is available of the validity of Carey's temperamental questionnaire as a descriptive instrument of the individual behavioural characteristics in children; it appears to be satisfactory (see Carey 1970-1972).

Carey's questionnaire was used for two reasons: First, quite a number of children were recorded directly during the first year of life; for older children, the questionnaire had to be used (and was suitable for this purpose) retrospectively. Secondly, Carey's questionnaire was devised for paediatric settings in particular.

DEVELOPMENTAL SOCIAL HISTORY - DEMOGRAPHIC DATA

Demographic data was collected during the early stages of assessment; included in the social history is information on family composition, ordinal position, social class, living conditions, financial position, employment, management of money and resources. The data was obtained by interviews and direct observations. Criteria for coding responses requiring interpretation were based in part on hospital norms and part on definitions worked out by the author with assistance from an experienced clinician. Some specifications are reproduced in Appendix 1.

Seventeen cases of failure-to-thrive children and their families were studied by means of interviewing and direct observations.
Two control groups were investigated in the same way.

The case history included:

a. Family background
b. Father's background
c. Mother's background

d. Development (motor, language, social, toilet training).

e. Mother-child interaction
f. Mother-child relationship
g. Father-child interaction
h. Father-child relationship
i. Relationship and interaction with siblings (where relevant)

ITEMS & CODING OF DEMOGRAPHIC AND CHILD-DEVELOPMENT DATA

| YES | 1 |
| NO: | 2 |
| NOT APPLICABLE | 9 |
| NO ANSWER | 0 |
| MALE: | 1 |
| FEMALE: | 2 |
DEMOGRAPHIC DATA

*see Appendix I*

SIZE OF FAMILY - LARGE 3+ CHILDREN
ORDINAL POSITION - FIRST BORN
WORKING CLASS
FINANCIAL POSITION, POOR, LOW INCOME
ON SUPPLEMENTARY BENEFIT
FATHER PROVIDES WELL FINANCIALLY
MOTHER AT WORK
GOOD MANAGEMENT OF MONEY
MOTHER WORKS AT HOME
DEBTS AND ARREARS OUTSTANDING
LIVING CONDITIONS GOOD
PRIVATELY OWNED HOUSE
SINGLE PARENT FAMILY
EXTENDED FAMILY AVAILABLE TO HELP
MOTHER RECEIVES HELP & SUPPORT FROM FRIENDS AND NEIGHBOURS

CHILD DEVELOPMENT

*see Appendix I*

PREGNANCY

PLANNED PREGNANCY
WANTED PREGNANCY
STRESSFUL PREGNANCY
RELAXED PREGANCY
ILLNESS DURING PREGNANCY
MEDICAL SUPPORT PROVIDED
SOCIAL CIRCUMSTANCES DURING PREGNANCY: GOOD
FULL TERM PREGNANCY

BIRTH
TYPE OF DELIVERY
BABY BORN
LABOUR
COMPLICATIONS DURING BIRTH

POST BIRTH FACTORS
BREATHING DIFFICULTIES
IN SPECIAL CARE BABY UNIT
OTHER POST BIRTH PROBLEMS
BABY DELIVERED IN HOSPITAL
MOTHER'S REACTION TO NEW BORN BABY

FAMILY CIRCUMSTANCES
PARENTS LIVING TOGETHER
OTHER CHILDREN TO COPE WITH

*Footnote: Medical/Paediatric criteria were applied where relevant - based upon discussion with consultant and/or case notes information
OTHER CHILDREN TO CARE FOR
OTHER CHILDREN DIFFICULT TO FEED
FINANCIAL CIRCUMSTANCES ADEQUATE WHEN BABY BORN
LIVING CONDITIONS ADEQUATE WHEN BABY BORN
PHYSICAL ENVIRONMENT REASONABLE WHEN BABY BORN
EMOTIONAL ENVIRONMENT GOOD WHEN BABY BORN
EXTERNAL FAMILY AVAILABLE TO HELP
FATHER HELPING IN EVERYDAY CARE
ADEQUATE NURSING ARRANGEMENTS
MOTHER WENT TO WORK SOON AFTER BABY WAS BORN
MOTHER'S PERCEPTION OF HER ABILITY TO COPE WITH THE BABY WHEN SMALL

FEEDING

SUCKING
RETAINMENT OF LIQUIDS
INDICATIONS OF HUNGER
REACTION TO BABY FOOD
REACTION TO HOME FOOD
SWALLOWING
CHEWING
RETAINMENT OF FOOD
VOMITING
DIARRHOEA
TIME TAKEN TO FEED BABY
SOMEONE THERE TO SHOW MOTHER HOW TO FEED BABY
SOMEONE THERE TO HELP WITH FEEDING ON AN EVERYDAY BASIS
CHILD’S MOODS DURING FEEDING

MOTHER-FEEDING STYLE*

MOTHER PATIENT WHEN FEEDING BABY
MOTHER PERSISTENT WHILE FEEDING BABY
MOTHER FORCEFUL WHILE FEEDING BABY
MOTHER WOULD SHOUT, SCREAM & SHAKE BABY WHEN FEEDING
MOTHER WAS NEGLECTFUL & UNCONCERNED ABOUT FEEDING BABY
MOTHER DETERMINED & COAXING WHILE FEEDING BABY
MOTHER PASSIVE WHILST FEEDING BABY
BABY HELD BY MOTHER DURING FEEDING
BABY FED IN PRAM OR COT
CHILD HAD LONG PERIOD OF REFUSING FOODS
CHILD WOULD TAKE FEEDS FROM HIS MOTHER
CHILD WOULD TAKE FEEDS FROM ANYONE BUT HIS MOTHER
CHILD WOULD FEED ONLY WHEN AWAY FROM HOME
CHILD GREW SATISFACTORILY

*Footnote: Based in large part on direct observation
also on interview data.
WAS ATTENTION DRAWN TO CHILD'S POOR GROWTH EARLY ON
MOTHER SEEKS ADVICE AND HELP REGARDING POOR GROWTH
HELP AND ADVICE PROVIDED IMMEDIATELY AFTER REQUEST WAS MADE
MOTHER WORRIED ABOUT CHILD'S POOR GROWTH
MOTHER BLAMED BY PROFESSIONALS FOR CHILD'S POOR GROWTH
MOTHER BLAMES THE CHILD FOR THE AGGRAVATIONS CAUSED BY HIS POOR GROWTH
MOTHER GETS DETACHED, AVOIDS THE CHILD, AS A RESULT OF THIS AGGRAVATION.
FATHER GIVES HIS SUPPORT TO THE MOTHER
FATHER FEEDS THE BABY
CHILD TAKES FEEDS FROM THE FATHER
FATHER AWARE OF THE EMOTIONAL DIFFICULTIES BETWEEN MOTHER & CHILD
FATHER SOUGHT PROFESSIONAL ADVICE
FATHER ASKED EXTERNAL FAMILY AND FRIENDS FOR HELP
FATHER PROTECTED HIS WIFE, KNOWING THAT THE RELATIONSHIP BETWEEN MOTHER AND CHILD WAS CAUSING CONCERN
MOTHER CO-OPERATED WHEN HELP WAS PROVIDED
FATHER ENCOURAGED MOTHER TO ACCEPT HELP
The data concerning Child Rearing Attitudes and Attachment Behaviour was collected by structured interviews. The former were broadly based on the Sears, Maccoby and Lewin questionnaire (Sear et al. 1957). Since most of the subjects in this study were at the lower age range, mostly babies and toddlers, not all of the Sears et al. questionnaire was applicable. Therefore, only relevant questions were selected. They were adapted for British subjects. The structured interview included such topics as:

a. attitudes to feeding, toilet training, discipline, play, relationship with siblings and other children, mother child interaction, father-child interaction, separation experiences, perception of the child by parents.

b. Bonding and Attachment, were investigated by means of a structured interview devised by the author, reproduced with its coding below:

**ITEMS AND CODING OF ATTACHMENT DATA**

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALE</td>
<td>1</td>
</tr>
<tr>
<td>FEMALE</td>
<td>2</td>
</tr>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>2</td>
</tr>
<tr>
<td>NOT APPLICABLE</td>
<td>9</td>
</tr>
<tr>
<td>INDEX GROUP</td>
<td>1</td>
</tr>
</tbody>
</table>
ATTACHMENT

SENSE OF BELONGING

DID MOTHER SEE BABY IMMEDIATELY AFTER BIRTH

MOTHER HELD BABY IN ARMS JUST AFTER BIRTH. FEELING HIM PART OF HER & OVERWHELMED WITH JOY, LOVING BABY STRAIGHT FROM THE START.

ALTHOUGH MOTHER HELD BABY IN HER ARMS, DID SOMEHOW FEEL HE WAS NOT HERS, FEELING SOMEWHAT PUZZLED AND UNCERTAIN OF HER FEELINGS.

THE BABY WAS RUSHED TO A S.C.B.U. AND MOTHER WAS NOT ABLE TO SEE HIM/HER UNTIL LATER; MOTHER FELT RATHER ALIENATED.

MOTHER FEELS THAT BABY SHOULD BE PICKED UP EVERY TIME HE CRIES.
MOTHER FEELS SHE SHOULD NEVER LET BABY CRY FOR VERY LONG TIME.

MOTHER ATTENDED TO BABY, EACH TIME HE CRIED DURING THE NIGHT.

MOTHER LOOKED FORWARD TO FEEDING BABY AS THEN SHE COULD HOLD HIM CLOSE IN HER ARMS.

MOTHER WORRIED EXTENSIVELY ABOUT BABY CRYING WHEN SHE DID NOT KNOW WHY.

MOTHER OFTEN TALKED AND PLAYED WITH HIM.

MOTHER FOUND HIM LOVABLE, GIVING HER A LOT OF PLEASURE.

A DEMONSTRATIVE MOTHER. ENJOYING A CUDDLE WITH HER CHILD.

THE BABY IS A DEMONSTRATIVE CHILD.

MOTHER HAD TIME TO SPEND WITH BABY APART FROM REGULAR CARE.

BABY ENJOYED BEING PICKED UP BY MOTHER, BEING CUDDLED AND TALKED TO.

BABY PREFERRED TO BE LEFT ALONE.

BABY PREFERRED TO BE WITH OTHERS RATHER THAN MOTHER.
BABY WATCHED MOTHER MOVING 'ROUND ROOM, FOLLOWING HER WITH HIS EYES.

HE TRIED TO FOLLOW BY ATTEMPTING TO MOVE AFTER MOTHER.

HE BEGAN TO CRY AND BECAME UPSET WHEN MOTHER LEFT THE ROOM.

WHEN MOTHER LEFT HIM WITH SOMEONE ELSE AND WENT OUT, HE GENERALLY PROTESTED AND CRIED.

WHEN MOTHER LEFT HIM WITH SOMEONE ELSE AND WENT OUT HE APPEARED JUST TO BE SAD.

WHEN MOTHER LEFT HIM WITH SOMEONE ELSE AND WENT OUT, HE TOOK NO NOTICE.

MOTHER THINKS BABIES ARE FUN TO TAKE CARE OF WHEN THEY ARE LITTLE.

MOTHER THINKS BABIES ARE MORE INTERESTING WHEN THEY ARE OLDER.

MOTHER AND CHILD GET ON WELL

MOTHER ENJOYS HER CHILD'S WAYS

MOTHER AND CHILD GET ON EACH OTHERS NERVES.
MOTHER AND CHILD SHOW AFFECTION TOWARDS EACH OTHER QUITE A BIT.

MOTHER AND CHILD ARE FAIRLY SHY, RESERVED PEOPLE.

MOTHER FOUND TIME TO PLAY WITH CHILD, JUST FOR HER OWN PLEASURE.

MOTHER FEELS THAT HER CHILD IS GROWING UP TOO FAST.

WHEN HE STARTED A PLAY-GROUP OR NURSERY, MOTHER MISSED HIM VERY MUCH.

SINCE HE STARTED PLAY-GROUP OR NURSERY, THINGS HAVE BEEN EASIER OR MORE PLEASANT FOR MOTHER.

WHEN CHILD ASKS FOR HELP, EVEN IF MOTHER KNOWS THAT HE CAN DO IT HIMSELF, SHE WILL HELP HIM.

CHILD IS ALLOWED OUT OF THE HOUSE BY HIMSELF.

CHILD HAS BEEN ENCOURAGED TO PLAY WITH OTHER CHILDREN, RATHER THAN PLAY ALONE.

MOTHER FEELS THAT EVERYONE AT HOME WOULD BE HAPPIER IF SHE DID NOT HAVE HER CHILD.

THE CHILD BRINGS THE MOTHER MUCH AGGRAVATION.
MOTHER FOUND THE CHILD HARD TO LOVE.

SEPARATIONS.

SEPARATED BECAUSE OF HOSPITALISATION

SEPARATED BECAUSE OF INABILITY TO COPE

SEPARATED BECAUSE OF REJECTION

SEPARATED BECAUSE OF INJURIES

SEPARATED FROM FATHER

SEPARATED FROM MOTHER

SEPARATED AS A RESULT OF INTERVENTION

DAY CARE PROVIDED

INABILITY TO COPE

LACK OF STIMULATION

POOR MOTHER-CHILD RELATIONSHIP

MOTHER CHILD INTERACTION

MOTHER SPENDS A LOT OF TIME WITH CHILD BEIDES REGULAR CARE
MOTHER OCCASIONALLY SPENDS TIME WITH CHILD BESIDES REGULAR CARE.

MOTHER SPENDS MINIMAL OR NIL TIME WITH CHILD BESIDES REGULAR CARE.

MOTHER OFTEN PICKS UP, SMILES AT AND TALKS TO BABY.

MOTHER OCCASIONALLY PICKS UP, SMILES AT AND TALKS TO BABY.

MOTHER RARELY OR NEVER PICKS UP, SMILES AT AND TALKS TO BABY.

MOTHER ENJOYS PICKING UP, SMILING AT AND TALKING TO BABY.

MOTHER WILL LET BABY CRY FOR LONG PERIODS OF TIME.

MOTHER ENJOYS BABY MOST WHEN LITTLE.

MOTHER ENJOYS BABY MORE WHEN OLDER

MOTHER ENJOYS BABY REGARDLESS OF AGE

MOTHER SHOWS AFFECTION TOWARDS CHILD

CHILD SHOWS AFFECTION TOWARDS MOTHER

MOTHER PLAYS WITH AND TEACHES CHILD TO PLAY
MOTHER'S ATTITUDE TOWARDS THE CHILD IS POSITIVE

MOTHER'S ATTITUDE TOWARDS THE CHILD IS NEGATIVE

MOTHER'S ATTITUDE TOWARDS THE CHILD IS INDIFFERENT

FATHER-CHILD INTERACTION

FATHER HAS ACTIVE ROLE AS CARETAKER
FATHER HAS OCCASIONALLY ACTIVE ROLE AS CARETAKER
FATHER'S ROLE AS CARETAKER IS MINIMAL OR NIL
FATHER OFTEN SPEAKS TO THE CHILD
FATHER OCCASIONALLY SPEAKS TO THE CHILD
FATHER RARELY OR NEVER SPEAKS TO THE CHILD
FATHER'S ATTITUDE TOWARDS THE CHILD IS POSITIVE
FATHER'S ATTITUDE TOWARDS THE CHILD IS NEGATIVE
FATHER'S ATTITUDE TOWARDS THE CHILD IS INDIFFERENT
FATHER SHOWS AFFECTION TOWARDS THE CHILD
CHILD SHOWS AFFECTION TOWARDS THE MOTHER

TOILET TRAINING

MOTHER FEELS THAT TOILET TRAINING FROM AN EARLY AGE IS IMPORTANT
MOTHER PERSISTANTLY AND STRICTLY CARRIES OUT TOILET TRAINING
FEEDING

BABY EASY TO FEED
BABY WAS BREAST FED
MOTHER HAS A REGULAR FEEDING SCHEDULE FOR THE BABY
MOTHER HAS PROBLEMS WITH THE BABY NOT EATING ENOUGH
MOTHER HAS PROBLEMS WITH BABY NOT EATING THE FOODS HE NEEDS
MOTHER TEACHES HER CHILD EATING SKILLS
MOTHER IS STRICT REGARDING TABLE MANNERS

DISCIPLINE AND MANAGING CHILD’S BEHAVIOUR

MOTHER HAS SPECIFIC RULES AS TO WHAT CHILD CAN OR CANNOT DO
CHILD GOES TO BED AT SPECIFIC TIME
CHILD IS ALLOWED TO MAKE A LOT OF NOISE
CHILD HAS FREEDOM TO PLAY
MOTHER EXPECTS CHILD TO BE IMMEDIATELY OBEDIENT
CHILD OFTEN GETS ANGRY WITH PARENTS
PARENTS ALLOW OUTBURSTS OF ANGER
PARENTS PUNISH THE CHILD FOR OUTBURSTS OF ANGER
PARENTS HAVE MANY PROBLEMS WITH CHILD’S OUTBURSTS OF ANGER
PARENTS TEACH THE CHILD TO BEHAVE DIFFERENTLY
PARENTS PUNISH THE CHILD SEVERELY
IN TRAINING, MOTHER GIVES OTHER PEOPLE AS EXAMPLES
CHILD IS FREQUENTLY SPANKED BY MOTHER
CHILD IS FREQUENTLY SPANKED BY FATHER
CHILD’S REACTIONS TO SPANKING - HURT FEELINGS
WHEN CHILD SPANKED, BECOMES ANGRY
SPANKING IS EFFECTIVE
MOTHER DEPRIVES CHILD OF SOMETHING AS MEANS OF DISCIPLINE
MOTHER OFTEN SCOLDS CHILD
MOTHER PROTECTS CHILD, WARNS HIM OF POSSIBLE DANGER
MOTHER IS ALWAYS PERSISTENT IN HANDLING THE CHILD
FATHER DISCIPLINES CHILD IF NECESSARY (WITH BOTH PARENTS PRESENT)
FATHER IS STRICT WITH CHILD
PARENTS ALWAYS AGREE ABOUT DISCIPLINING THE CHILD
FATHER THINKS THAT MOTHER IS TOO STRICT WITH CHILD
MOTHER THINKS FATHER IS TOO STRICT WITH CHILD
MAIN DECISIONS CONCERNING CHILD ARE MADE BY MOTHER
MAIN DECISIONS CONCERNING CHILD ARE MADE BY FATHER
MAIN DECISIONS CONCERNING CHILD ARE MADE JOINTLY

RELATIONSHIP WITH SIBLINGS AND OTHER CHILDREN

CHILD GETS ON WELL WITH SIBLINGS
MOTHER INTERVENES WHEN CHILD AND SIBLINGS ARE FIGHTING
MOTHER SORTS OUT FIGHTS BETWEEN CHILDREN JUSTLY AND MAKES NO PREFERENCES.

MOTHER PRAISES CHILDREN WHEN THEY BEHAVE AND PLAY WELL
CHILD GETS ON WELL WITH NEIGHBOURHOOD OR NURSERY CHILDREN
MOTHER ENCOURAGES CHILD TO PLAY WITH OTHER CHILDREN, RATHER THAN PLAY ON HIS OWN.

IN TERMS OF TEMPERAMENT, PERSONALITY AND PHYSICAL LOOKS CHILD TAKES MORE AFTER FATHER.
IN TERMS OF TEMPERAMENT, PERSONALITY AND PHYSICAL LOOKS CHILD TAKES MORE AFTER MOTHER.

PARENTS ARE ALIKE IN TEMPERAMENT
PARENTS SHARE THEIR IDEAS ABOUT THE IMPORTANT THINGS IN LIFE
MOTHER WORKED BEFORE HAVING FAMILY
MOTHER ENJOYED WORKING
MOTHER LIKES BEING AT HOME AND LOOKING AFTER CHILDREN
MOTHER WANTED FAMILY
MOTHER IS RESENTFUL TOWARDS HER NEW RESPONSIBILITIES
MOTHER IS SATISFIED WITH CHILD'S SEX
MOTHER'S PARENTS WERE STRICT
FATHER'S PARENTS WERE STRICT
WARMTH OF MOTHER'S PARENTS
WARMTH OF FATHER'S PARENTS
MOTHER IS BRINGING UP HER CHILDREN IN A SIMILAR WAY TO THE WAY SHE WAS BROUGHT UP
MOTHER IS PLEASED ABOUT THESE CHANGES
REGULAR CARE OF CHILD IS GOOD

Observation:

a. Observation of the child and family in hospital (interaction in particular),

b. Observation of the child and family at home (interaction and functioning).
c. Observation of the child in the nursery or playgroup (where relevant).

C. EVALUATION OF BEHAVIOURAL CASEWORK INTERVENTION (see Appendix)

1. The behavioural and interactional problems were assessed and dealt with using behavioural casework approach (see below for an elaboration of methods). An N=1 (intrasubject A.B.C.) experimental design was used to evaluate changes in presenting problems i.e. A = Baseline measures against which to measure change (if any) when interventions B, C, etc. are introduced and their 'effects' monitored. The progress of each individual case was evaluated by both therapist and parents. Improvement was defined as a change in the child's target behaviours (and other family-orientated interactional targets) towards the goals set for those problems.

The degree of improvement was further refined into categories.

a. All goals reached and a full satisfaction with the improvement (+2)

b. Only some goals reached or partially reached (+1).

c. No change occurred (0)

d. Moderate deterioration (-1)

e. A significant deterioration (-2).

2. Description of typical assessment (Page 2/8).
In the casework assessments leading to intervention we are on the alert for various causally related factors (which are mentioned in the literature) and for other factors which might not be; the framework described in Figure 8.1 provides us with a guide to all of the potentially important influences. In trying to define precise target behaviours in the failure-to-thrive syndrome, one is dealing with a wide spectrum of child's behaviours and mother-child interactions. These have been detailed in Chapters 1 and 2. The formulation of explanatory hypotheses is based on a data base, derived from information in Table 8.1 about the various items in Figure 8.1.

Organismic Factors:

There are various organismic factors which need to be assessed in order to understand intrinsic features of the child. There is a need to identify any contribution by somatic factors to the child's problems. There are all sorts of things going on within the organism which might contribute to the problem, e.g. his health, temperament and so on. After all, the child's behaviour is determined by intrinsic and extrinsic factors. He is
Figure 8.1: General Assessment Guidelines

- **Organismic Variables**: Age, Sex, Health, Competencies, Achievement, Self-concept, Personality, Temperament

- **Behaviour**
  - **Antecedents**
    - **Events**: Setting, Antecedents
    - **Parameters**: Duration, Number, Intensity, Frequency, Social, Diagnostic Implication
  - **Consequent Events**: Situations, Places, Persons

- **Distal Outcomes**
- **Proximal Outcomes**
responding to an external and an internal environment as he grows up.

The uncertainties about the taxonomy of the failure-to-thrive problem make correlations with organic factors doubtful. No obvious and known organic pathology has been found, and for that very reason what we are dealing with is called non-organic failure-to-thrive. But there could be undetected organic features; and what remains unexplained are the physical pathways by which psycho and sociogenic influences affect growth. There have been many extensive attempts to measure and test the growth hormone functioning in these infants and children (Patton & Gardner, 1962; Talbot, 1947) but they have found no clear evidence to support particular hypotheses.

There is some evidence that babies born prematurely or low birth babies are predisposed to failure-to-thrive (Vietze et al., 1980; Pollitt et al., 1978). Their findings indicate that birth conditions can lead to immediate consequences for the mother-infant interaction which may, in turn, set up a chain of events resulting in poorly growing infants. This chain of events remains to be clearly specified.

Further complexity is introduced by the fact that organic and non-organic factors may combine to produce failure-to-thrive more commonly than previously anticipated (Kempe, 1980). Failure-to-thrive sometimes begins with an organic condition like pyloric stenosis, hiatus hernia, allergy to milk etc., but continues after the physical factors are corrected by surgery or medication.
Psychological problems have become superimposed on an extinct physical disorder. Gordon et al. (1979) speculate on the possibilities of different functioning of the sympathetic nervous system in children where this occurs. However, there is no clear evidence for this.

Possibly significant influences to take account of in any assessment, are as follows:

Age

Failure-to-thrive is reported (Glaser et al., 1968) to occur mainly in early infancy. Symptoms appear soon after birth in at least half of the population of non-organic failure-to-thrive and in almost all instances during the first year of life. However, a number of researchers have reported later onset of failure-to-thrive (as stated below). While the age is recorded at the point of admission to hospital, the history indicates that actual weight and feeding problems have begun much earlier on. McCarthy (1976) reported the age range at the point of referral as being between six months and five years.
Leonard et al. (1966) from ten weeks to twenty-seven months; Gordon et al. (1979) from twelve months to nineteen months; Goldson et al. (1976) from six weeks to eight years; Pollitt (1976) from one to five years; Fischhoff et al. (1971) report it as being from three to twenty-four months; Patton et al. (1962) from fifteen months to six and a half years; Toqut et al. (1969) from eleven days to twelve months. In summary, the age of failure-to-thrive infants varies, but it would appear that it starts soon after birth and can persist for several years.

Sex

The sex distribution in failure-to-thrive children is not clearly specified by all writers. Some simply refer to them as infants or children. However, it appears that there are few differences between the number of male infants and children and those of females presenting the problem. Leonard et al. (1966) reported eight boys and five girls; Goldston et al. (1976) sixty-nine boys and seventy-one girls; Pollitt (1978) twenty-one boys and nineteen girls; Vietze (1980) eighteen boys and seventeen girls; Toqut et al. (1969) six boys and three girls. What is required is epidemiological survey data. As the data on sex distribution is not always reported, it could be that there are no marked sex differences in failure-to-thrive children, at least in those cases presenting themselves to hospital out-patients departments.
IDENTIFICATION OF THE CONDITIONS CONTROLLING THE PROBLEM BEHAVIOUR

Problem behaviour is regarded as a function of somatic factors, previous learning experiences and contemporary events. The assessment of these events is directed towards the precise identification of the antecedent, outcome and symbolic conditions which control the problem behaviour. Firstly, certain antecedent conditions may be eliciting or reinforcing problem responses especially those of an emotional kind, while other such conditions may involve some lack of appropriate discriminative stimulus control over the client's instrumental responses. Second, there may be outcome conditions which either reinforce problem behaviour or punish or extinguish desirable responses. Third, any of these inappropriate forms of antecedents or consequence control may be operating in the client's symbolic processes, rather than in his external environment or physiological changes, or there may be an impairment of his problem-solving capacity (see Herbert, 1981).

The identification of the somatic factors or contemporary events which are controlling a problem behaviour may be drawn from the client's history (the so called distal antecedents). The history will cover any previous learning experiences, which might have contributed to a present problem of failure-to-thrive. Certain experiences like rough handling during eating (i.e. during what should be a calm period) forceful and painful feeding, screaming and shouting at the child, may have resulted in the classical conditioning of fear/avoidance responses to the act of eating. The best way (in the author's opinion) to illustrate the process
of learning and what is controlling the problem behaviour in failure-to-thrive children is to look at the distal and proximal antecedents and proximal and distal consequences (see Fig. 8.1).

There are various possible influences leading to failure-to-thrive problems. It could occur as a result (in some cases) of an organic disorder like a hiatus hernia or pyloric stenosis, or any other early illnesses, which have produced discomfort and pain while the infant is being fed and although the physical disability has been resolved, the child persistently avoids the feeding situation because of previous painful experiences. However, this seems to be the case in only a small minority certainly a matter to be checked in this study.
Most children who fail-to-thrive present acute feeding difficulties from very early on without any apparent organic conditions being present. The early feeding experiences for such children appear to be distressing. Looking at the history, it seems likely that such children learn on a classical-cum-operant basis to avoid food by associating feeding with distressing experiences: forcing, hurrying, shaking, smacking, scolding, throwing on the part of the parent/s. In many cases the fear of eating may have been conditioned by the impatient, intolerant or angry reactions of the mother. Mother's presence (generally) or specifically (in the feeding context) becomes a stimulus to evoke fear. (We have examples of her proximity producing physical symptoms like vomiting, diarrhoea in the child). Maternal rejecting attitudes (sometimes posited as a failure of bonding) could be a contributory factor to failure-to-thrive, by having implications for the commission and/or commission of certain actions of benefit or harm (respectively) to the child.

*Footnote* One of the claims being investigated in this study.
Proximal Antecedents

Rejecting (or in other ways, emotionally inappropriate) behaviours are postulated to antedate failure-to-thrive. For some children rejection means callous and indifferent neglect or hostility, and cruelty from the parents. This rejection does not always take the form of physical cruelty or neglect. It may be emotional and subtle. Rejection is a form of parental behaviour that is characterised by the absence, or withdrawal, of warmth and affection. Rejecting parents often dislike, disapprove of, or resent their child. In many cases, they view him/her as a burden and they compare him unfavourably with other children.

The absence of warmth and affection is revealed in two principal ways, by open or disguised hostility or aggression toward the child, or by indifference, which is often expressed as neglect. Parental hostility is an internal emotional reaction of anger, enmity or resentment toward the child and may reveal itself in forms of overt physical or verbal aggression. Hostile parents, for example, may be irritable toward their child, critically impatient, or antagonistic; they may curse him or speak to him in harsh, deprecating tones of voice. Hostile, aggressive parents may also be very rough or abrupt in their handling of their child and they may punish their children often and severely. Punishment per se, however, is a form of parental rejection only insofar as it is a clear expression of hostility or aggression toward the child.
Indifferent, neglecting parents, on the other hand, are not necessarily hostile toward their children. They may be simply unsympathetic, cold and distant; they are often physically and emotionally unavailable or inaccessible to their children, and they tend to be unresponsive to their children's needs and wishes. Such parents show a restricted concern for their children's welfare. They pay as little attention to him as they can, and they spend a minimum amount of time with him. Not infrequently they forget promises they have made to him, and they fail to attend to other details or needs important to his happiness or well-being, e.g. adequate and regular meals. Such a rejecting environment reflects on a child's health and his/her personality formation and seriously disrupts development and socialization.

A rejected child is likely to be more dependent — to be clingly, intensely possessive, and to seek parental approval, nurturance, attention and physical contact — than the accepted child. As I noted earlier, all humans have basic need for positive responses, but if a child's 'significant others' are rejecting, and if his needs for warmth and affection are unfulfilled, he will, up to a point, increase his efforts to get love and attention. In other words, he will become dependent (Herbert 1974). Beyond a certain point, the dependency response may be extinguished. The seriously rejected child has not learned how to give love, because he has never known a loving parent after whom he can model his own behaviour, and, for reasons described below, even though he craves affection he has difficulty accepting it.
In order to protect himself from more emotional hurt, the rejected child tends to insulate his emotions. Ultimately he stops trying to get affection from the people who are important to him. Dependency responses disappear. Thus the rejected child becomes emotionally isolated, unable freely and openly to form warm, lasting and intimate relations with others. His attachments tend to be troubled by emotional constriction or defensiveness, and in extreme cases the rejected child may become apathetic or emotionally bland or flat. In addition, as a result of the grave psychological damage brought about by rejection, the rejected child is inclined to have less tolerance for stress, and he is, therefore, likely to be less emotionally stable than those who were accepted as children (Herbert 1974). The rejected child is apt to become resentful or angry at his parents, as well as fearful of more rejection, thereby producing a 'defensive' independence – or emotional withdrawal – from them. In doing so, the child initiates a process of counter-rejection. Behind his defensive independence or emotional detachment is often an unrecognised longing to re-establish a warm, nurturant relationship with his parents. The child is especially likely to be hostile, aggressive, or passive-aggressive if rejection takes the form of parental hostility. Under these conditions he is provided with an aggressive model to emulate, and thus his own aggressive responses may intensify (see Bandura and Walters 1963). Ineffectual and rejecting parenting is likely to show up in disturbance of eating, toilet training and general compliance as they are the first tasks of every child’s socialisation.
The analysis of proximal antecedents allows us to observe what elicits unadaptive behaviour on the part of the mother or both parents and on the part of the child in care-giving (i.e. feeding) situations. Maternal anxiety, excessive concern, worries and guilt; anger and hostility, create an atmosphere prior to feeding or any other care-giving activities which trigger fear reactions in the child, and avoidance or oppositional behaviour. The child will not respond to his mother’s requests for him to eat. The way the mother interacts with the child is critical. Some show their indifference or resentment by propping up the bottle for the child to drink, so there is a minimum of interaction, or holding the infant awkwardly (e.g. facing away from her). Feeding may become fighting (although not in all instances of failure-to-thrive). After a period of painful struggle, mother becomes a discriminative stimulus for oppositional behaviour on the part of the child - shown by his refusal to eat and respond to her.

Consequences - Proximal:

The proximal outcomes are various. The first consequence of a child inadequately or inappropriately fed is one of a starving child who loses weight, becomes lethargic and withdrawn, or cries persistently and sleeps too little or far too much of the time. The mother often feels helpless and desperate, unable to manage her own feelings and actions. That, in turn (one observes frequently in one’s practice) reflects seriously on the family relationships, but in particular the marital relationship. The father often accuses the mother of mismanagement and inadequate child care.
There may ensue serious friction between the parents; in turn the interaction between the mother and child becomes more resentful, painful and destructive. The more pressures the mother puts on her child, the less responsive he becomes. She feels rejected by the child as she does not seem to be able to reach him. The two appear to grow emotionally apart, mother blaming her child for all the misery she receives from her husband and immediate family, as well as the Baby Clinics, G.P. and health visitor.

A result of such a sequence of aversive interactions may be that the child develops a serious aversion to food, perhaps even, a food 'phobia'. Development can be retarded especially if he continues to be reared in social isolation and in conditions of emotional instability. His appearance deteriorates, which brings about social criticism from various social agencies, neighbours, friends and immediate family. There is constant fear that the child might die from starvation. Most of the mothers show extreme worry about the child's life. Demoralisation and helplessness are features of most of the mother we see. The frustration and irritability which becomes an everyday feature of maternal functioning leads, at times, to physical abuse and almost always to rejection and neglect. Marital relationships, at times, come to a point of breakdown; in some instances the father leaves home, unable to cope with the situation especially when the child is placed on the 'At Risk' register or received or committed into care. There are additional long-term consequences if the child remains at home and nothing is done during the early stages of failure-to-thrive, he is quite likely to develop serious behaviour problems, especially non-compliant coercive behaviours (such as screaming, tantrums
etc). Others withdraw into silent passivity.

Related Problems

A great proportion of failure-to-thrive children are said to develop acute conduct problems between the second and third year of life viz. non-compliant and coercive behaviours of the high rate and high-intensity type*. The display of seriously disobedient behaviour is often accompanied by displays of temper tantrums, aggression (both verbal and physical especially during mealtimes), demanding and screaming. Self-harming, autoerotic problems, elimination and sleeping disturbances are also observed in some of these children. Deficit problems are evident in those who present all-round developmental delays. They remain withdrawn, apathetic, lethargic, avoiding members of the family, especially siblings, isolated, lacking assertiveness and the ability to stand up for themselves. They appear to be unresponsive to a wide range of stimuli.

*Footnote
To be investigated in this thesis, like many of the variables referred to in this Chapter, which are based either on findings from the literature, or observations from the author’s casework experience.
Situation Specificity

 Behaviour is not usually manifested on a random basis; the probability of a specific action occurring varies accordingly to the surrounding environmental cues. To understand and predict the conduct, we need to find out how behaviour co-varies with different environmental stimuli, i.e. how antecedent situations affect a particular action.

 Setting events:

\[
\text{Behaviour} \quad \{ \text{Persons, Places, Time, Situations} \}
\]

 Persons:

 Refusal to take feeds are said to occur mostly with the mother, in some cases with other people (and rarely everybody). The father can usually feed the child with reasonable success, or it may be one of the older siblings who can get the child to eat. The child will usually take feeds from the health visitor or neighbour, hospital and nursery staff. The child will also become more alert when mother is out of sight and when he is in the company of other people.
Most problem behaviours are home specific. The child will usually
recover in hospital, will gain weight and his feeding pattern will
improve whilst there. When discharged home he very often relapses
to a worrying degree and has to be re-admitted to hospital again.
The child also tends to improve in foster homes or when he is
placed with relatives.

Refusal to eat tends to occur at times and it is rather difficult
to specify precisely which meal of the day is the most difficult.
However, some mothers report exceptional difficulties at breakfast
time.

Complete refusal to take feeds is usually manifested when there
is acute family tensions, when mother is angry, screaming and
shouting at the children prior to mealtime, or when she is
hurrying and forcing the child to eat on demand. In some cases
the child will co-operate with the mother and take his food but
he appears to get little nourishment and growth-gain from it.
The acronym FINDS refers to the specification of the targets (be they feeding or other behaviour problems) in terms of their frequency, number and duration and the sense they make from the client's point of view.

**Frequency:**

The frequency in relation to feeding difficulties (perhaps complete refusal to eat) could be constant if mother feeds the baby or supervises the child during mealtimes. This depends on the deterioration in their relationship. It could also be more variable. The frequency of emotional and/or conduct problems tends to be high and it increases as the child grows older.

**Intensity:**

Intensity of feeding difficulties and refusal to eat varies (in a manner that requires careful study). It can manifest itself in extremely high levels of screaming and is very anger-provoking in the mother or both parents. The prolonged intensity of this problem produces negative feelings in both parents generally and
in predisposed parents, leads to abuse, neglect and further rejection. Intensity of other behaviour problems like disobedience, screaming, aggression, is high especially at mealtimes.

Number:

The number of coexisting behaviour problems is generally high and varies from bad to good days.

Duration:

Acute struggles over eating begin (according to my experience) when solids are introduced. Weaning time is prolonged and difficult. Feeding time while on liquids takes 2-3 hours and manifests itself in the form of poor sucking, falling asleep, refusal to suck, crying while being fed. When on solids it takes a more acute form of fighting, heaving, refusal to swallow, throwing dishes, screaming. Time of feedings tends to range from one to one and a half hours, with little result. The duration of related behavioural problems like screaming, demanding, non-compliance, temper tantrums is prolonged. When a child is in a bad mood he can remain excessively difficult and irritable all day, escalating from one problem behaviour to another.

Sense:

The child's difficult behaviour, although dysfunctional in a general and obvious sense, may be 'functional' for him i.e. they
serve to solve some of his problems (Herbert, 1981). It makes sense that a child avoids situations and people which he associates with unpleasant and painful events. There is in a sense 'good reasons' why he resists eating. There is not only an angry and forceful feeding process, which prevents the child from eating calmly; it also provokes fear. Some mothers are extremely anxious that the infant may not take sufficient food and interpret every cry of distress as a signal of hunger. Over-feeding can lead to a gastric discomfort, crying, vomiting and eventually to acute resistance to feeding with anorexia.

The child fights back against what and who brings him distress. The aversive outcome of the interaction with his mother or other members of the family intensify the avoidance behaviour. In serious cases there is a process of stimulus generalisation and the child not only avoids food, but the people who feed him. He may withdraw himself from his environment, becomes lethargic and depressed. He may also 'act out' with aggressive behaviours. As he grows older he may develop new strategies to cope with an intolerable situation. Because of a worrying appearance and low weight, some children are given what they want and when they want, especially special foods. Gradually he learns how to manipulate the people around him in order to get, or to do, what he wants. Coercive non-compliant behaviour is displayed almost always at mealtimes, but also generalises itself to other areas.
The treatment of failure-to-thrive cases usually involved four stages:

1. Resolving feeding difficulties and improving feeding style, i.e. modifying maternal behaviour and responses during the act of feeding.

2. Deliberately and in a planned fashion increasing positive interactions and decreasing negative interactions between mother and child and indeed other members of the family - where relevant. This might involve attempting to desensitise the child's anxiety and fear with regard to mother's feeding and other caregiving activities. We might also have to desensitise the mother's tension, anger and resentment when in the child's company.


4. Some older children with a longer history of failure-to-thrive presented behavioural problems. These were dealt with if and when the "emotional arousal" in the family, but especially between mother and child, improved. It was generally thought to be unwise and also unproductive to deal with all presenting problems at the same time. First, some irritating and worrying behaviours do resolve themselves once the child is emotionally 'accepted' by the
mother and when her responses to the child are more positive. Second, by including all problematic behaviour therapy could well overburden an already tired, demoralised and depressed mother who, by this time, has very little coping capacity.

During the assessment period we pay attention to immediate needs. It is advisable sometimes to arrange day nursery care for the child. It is beneficial for the social worker dealing with the family to discuss the assessment and the intervention plan with the mother (but certainly both parents) where there is a father present. It is important to remember that the mother needs help in her own right, as well as the father. Most mothers of failure-to-thrive children need to learn to control feelings of anger, rage, hostility and to deal with high levels of anxiety. This may be achieved (before any formal programme) by doing relaxation exercises; the child-free period might be used to learn and practise how to relax and also behavioural self-control skills (see Herbert, 1981). Developmental counselling may play a part when parental knowledge and expectations of children and child-care are faulty.

No two cases are alike, but here follows a fairly 'typical' sequence in 'typical' intervention:
STAGE 1

Feeding is tackled in a highly structured (and thus directive) manner. Meal times have to be made more relaxed. Mothers are asked (and rehearsed) to desist from screaming, shouting and threatening the child over meals (self-control training). The period of eating is made quiet and calm. The mother is asked to talk soothingly and pleasantly to the child. It is extremely difficult for mothers to achieve and maintain this pattern of behaviour. It is essential that the social worker models the feeding; feeds the child a few times and then helps to reassure the child; she may have to prompt the mother to help the child to eat in a gentle manner when he is in difficulties. The mother is encouraged to look at him, smile and touch him. If the child refuses his food, the mother has to leave him, if she can not encourage or coax him by play or soft words. The food should be arranged decoratively to look attractive. She should never feed the child when feeling acutely tense or angry. This aspect of the programme is purely instrumental in the sense of encouraging the child to eat by creating less fraught circumstances.

STAGE II

This phase is discussed in detail; rationale and methods are explained to both parents. In most cases a contract is drawn up specifying the mutual obligations and rules for the family
and social worker (see Herbert 1981). What might happen in situations where interactions are aversive is that mother is encouraged to play exclusively with the child each evening after her husband returns from work, for ten to fifteen minutes during first week, for fifteen to twenty minutes the second and third weeks and twenty-five to thirty minutes during the fourth and subsequent weeks. After the mother's session with the child the rest of the family might join in for a family play session. The way the mother plays and the toys she uses, may have to be demonstrated and rehearsed with her. She is encouraged to talk to her child in a soft reassuring manner, encouraging him to participate in the play.

The mother is also encouraged to smile at the child, look at him, hold his hand, stroke his hair and praise him for each positive response he gives. This may require successive approximations if his behaviour is very timid. (The tentative approaches towards the mother are shaped by a series of reinforcements for mini-steps towards the goal, viz. successive approximations). After a few days or even weeks, the mother is guided to seek proximity to him by hugging him briefly and holding him on her lap for increasing intervals of time, eventually holding him close but gently, while reading to him, looking at and describing pictures etc.

Most rejecting mothers in our sample have found this very difficult and at times distasteful, but gradually less so when the child begins to smile back, seeks her presence and in other ways respond to her overtures. This period of
therapy requires a lot of support for the mother and the whole family. Frequent visits and telephone calls should be made to monitor the programme (reinforcing the reinforcer is critical in this work). It could take three months of hard work to bring a mother and child closer together to the point of beginning to enjoy each other.

STAGE III

The final stage is planned to include two weeks of deliberately intensified mother-child interaction. The mother is to take the child with her wherever she goes, whatever she does—within reason. She has to chat to him as much as possible, regardless of whether or not he fully understands what she is doing or saying. She should make a lot of eye contact, smile at him, cuddle him, hug him. This is a period of 'over-learning'. Apart from having him with her for everyday activities, she should spend time playing with all her children, encouraging the target child to participate in the play with his siblings. A bedtime story for all children might be introduced.

A formal programme is faded out gradually (over a period of several weeks—depending on the particular case) after discussing with both parents the importance of a stimulating environment and a rich reinforcement schedule for the maintenance of the improvements they (hopefully) have both achieved. The case is terminated when there is evidence of the child’s stable growth (measured by a paediatrician) and
evidence of improved family interactions, maternal feelings and attitudes towards the child (these are always carefully monitored).

During the period of intervention by the author, the children and their families routinely attended out-patients clinics, where the growth and weight was measured. The author was present, jointly with the paediatricians; the progress in all areas was discussed with the parents. The attendance at that clinic continued until the child's growth and development was considered to be satisfactory.

**POST INTERVENTION**

**Follow Up.**

Two types of follow-up study were carried out.

a. The author's six month and one year post termination follow-up investigations.

b. A final follow-up independent study was done by four final year psychology students. Each student was allocated four cases. A questionnaire covering various aspects of the effectiveness of treatment was used. The interviews were carried out at home. The data was then combined to give the overall results of the intervention at the follow-up point.
The results of the present investigation fall into two main sections:

(i) Comparison of an index group of failure-to-thrive children and their families with the control (contrast) groups.

(ii) An evaluation of the treatment (a behavioural casework intervention) of all the members of the index group of failure-to-thrive children. Each child acted as his/her own control. (i.e. an intra-subject comparison, N=1 experimental design was utilised).
CHAPTER 9

II. COMPARISON OF GROUPS

A. DEMOGRAPHIC RESULTS

Table 9.1. Size of family.

<table>
<thead>
<tr>
<th>Group</th>
<th>Large 3 + children</th>
<th>Small 1 or 2 children</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>13</td>
</tr>
</tbody>
</table>

N.S.

This result has no statistical significance. However, in the failure-to-thrive group forty-one percent have large families compared with eighteen percent and twenty-three percent from control groups one and two respectively.

Table 9.2. Ordinal Position

<table>
<thead>
<tr>
<th>Group</th>
<th>First Born</th>
<th>Not First Born</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>

N.S.

There is no significance in this result. Contrary to frequent assumptions that failure-to-thrive is due to mother’s lack of experience and mismanagement, the results show that only thirty-five percent of children were first born
from the failure-to-thrive group and twenty three percent and forty-one percent from control groups one and two respectively.

Table 9.3. Social class

<table>
<thead>
<tr>
<th>Group</th>
<th>Class 5</th>
<th>Class 4&amp;3</th>
<th>Class 1 &amp; 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

N.S.

There is no statistical level of importance in this result.

Table 9.4. Living Conditions

<table>
<thead>
<tr>
<th>Group</th>
<th>Inadequate</th>
<th>Marginal</th>
<th>Adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>3</td>
<td>13</td>
</tr>
</tbody>
</table>

\[ X^2 = 10.3 \]

\[ P < 0.04 \]
There is a level of statistical difference in regard to these results. As many as forty-seven percent of failure-to-thrive children have inadequate living conditions compared with twelve percent and six percent from control groups one and two respectively.

Table 9.5. Financial Position

<table>
<thead>
<tr>
<th>Group</th>
<th>Inadequate</th>
<th>Marginal</th>
<th>Adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>2</td>
<td>13</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 13.6 \]

\[ P < 0.03 \]

There is a significant level of statistical difference in this result. It is noticeable that a higher percentage of parents from the failure-to-thrive group are near or below the poverty line. Forty-one percent from the failure-to-thrive group find their financial position inadequate compared with eighteen percent and twelve percent from control groups one and two respectively.

Table 9.6. Good Management of money

<table>
<thead>
<tr>
<th>Group</th>
<th>Inadequate</th>
<th>Marginal</th>
<th>Adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>0</td>
<td>16</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 14.0 \]

\[ P > 0.05 < 0.1 \]
There is a trend but it does not reach a statistically significant level. A fairly high percentage of parents from the failure-to-thrive group mismanage their money compared with the two control groups. Forty-seven percent of mothers from failure-to-thrive group mismanage their money compared with twelve percent and six percent from control groups one and two respectively.

Table 9.7. On Supplementary Benefits

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>15</td>
</tr>
</tbody>
</table>

N.S.

There is no statistical significance in this result.

Table 9.8. Mother goes to work

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>17</td>
</tr>
</tbody>
</table>

$X^2 = 6.3$

$p < 0.04$

There is a level of statistical difference in this result. Twenty-nine percent of mothers from the failure-to-thrive group go to work compared with twelve percent and zero from control groups one and two respectively.
Table 9.9. The mother takes work home to help financially

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>15</td>
</tr>
</tbody>
</table>

N.S.

There is no statistical significance in this result.

Table 9.10. The family owns the house

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
<td>6</td>
</tr>
</tbody>
</table>

N.S.

There is no statistical difference in this result. However, only thirty-five percent of the failure-to-thrive group and control group one are houseowners compared with sixty-five percent from control group two.

Single Parent family

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>16</td>
</tr>
</tbody>
</table>

N.S.

There is no statistical significance in this result.
Table 9.12. An extended family available to help.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

$X^2 = 9.5$

$P < 0.04$

There is a level of statistical difference in this result. We can see that twenty-nine percent of the failure-to-thrive group and control group one have an extended family available to them compared with seventy percent of control group two.

Table 9.13. The mother receives the help and support from friends and neighbours.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

$X^2 = 11.6$

$P < 0.02$

There is a high level of statistical difference in this result. Only eighteen percent of mothers, receive help and support from friends and neighbours, from the failure-to-thrive group compared with thirty-five percent and seventy-one percent from control group one and two respectively.
B. THE HOME AND FAMILY

The family history (maternal and paternal background, marital relationship and family solidarity and unity) is presented under three categories: Inadequate, Marginal and Adequate. The criteria for the categories are illustrated in an example provided in Appendix 1.

Table 9.14. Mother's history (physical and emotional care in childhood).

<table>
<thead>
<tr>
<th>Group</th>
<th>Inadequate</th>
<th>Marginal</th>
<th>Adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6 (35%)</td>
<td>5 (30%)</td>
<td>6 (35%)</td>
</tr>
<tr>
<td>2</td>
<td>5 (30%)</td>
<td>2 (12%)</td>
<td>10 (58%)</td>
</tr>
<tr>
<td>3</td>
<td>4 (24%)</td>
<td>4 (24%)</td>
<td>9 (52%)</td>
</tr>
</tbody>
</table>

N.S.

Mothers of non-organic failure-to-thrive children have experienced approximately the same overall degree of disadvantage during childhood as both Control Group mothers. However, more of them experienced the extremes of violence and neglect 38%, compared with 30% and 24% of the first and second control groups respectively.
Table 9.15. Father's history (physical and emotional care in childhood)

<table>
<thead>
<tr>
<th>Group</th>
<th>Inadequate</th>
<th>Marginal</th>
<th>Adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 (33.3%)</td>
<td>2 (13.3%)</td>
<td>8 (53.3%)</td>
</tr>
<tr>
<td>2</td>
<td>2 (13%)</td>
<td>5 (31%)</td>
<td>9 (56%)</td>
</tr>
<tr>
<td>3</td>
<td>3 (18%)</td>
<td>3 (18%)</td>
<td>11 (64%)</td>
</tr>
</tbody>
</table>

N.S.

2-no information - Index Group
1-no information - First Control.

Father's of non-organic failure-to-thrive children have experienced approximately the same overall degree of disadvantage during childhood as fathers from the organic failure-to-thrive group (viz 47% and 44% respectively).

More of them experienced the extremes of violence and neglect. The fathers of children in the control group 2 experienced difficulties in their childhood in 36% of cases. However, no statistical level of significance has been reached on this
<table>
<thead>
<tr>
<th>Group</th>
<th>Inadequate</th>
<th>Marginal</th>
<th>Adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 (7%)</td>
<td>6 (40%)</td>
<td>8 (53%) 2 - no information</td>
</tr>
<tr>
<td>2</td>
<td>2 (13%)</td>
<td>1 (6%)</td>
<td>13 (81%) 1 - no information</td>
</tr>
<tr>
<td>3</td>
<td>2 (13%)</td>
<td>0 (0%)</td>
<td>14 (87%) 1 - no information</td>
</tr>
</tbody>
</table>

$X^2 = 11.2$

$p < .02$

$TAU B = .24 p < .03$

There are differences in the quality of the marital relationships between the couples within the three groups (reaching a relatively high level of statistical difference). Relatively small proportions of the couples from all groups have inadequate marital relationships (i.e. mutual hostility, hatred, violence). However, greater differences exist in the marginal (i.e. friction, quarrels, and disagreements) categories of marital relationship. In the non-organic failure-to-thrive group six couples (40%) had marginal marital relationships compared with one (6%) and no couples (0%) from the first and the second control groups respectively. The first and second control group couples seem to have happier and more stable marital relationships than the index group couples (19% and 13% and 47% on a comparison of Inadequate/Marginal categories combined).

There is a positive correlation between group membership and the quality of marital relationships, with the index group showing the least satisfactory relationships.
Table 9.17. Family solidarity and unity

<table>
<thead>
<tr>
<th>Group</th>
<th>Inadequate</th>
<th>Marginal</th>
<th>Adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 (24%)</td>
<td>6 (35%)</td>
<td>7 (41%)</td>
</tr>
<tr>
<td>2</td>
<td>3 (18%)</td>
<td>1 (6%)</td>
<td>13 (76%)</td>
</tr>
<tr>
<td>3</td>
<td>2 (12%)</td>
<td>1 (6%)</td>
<td>14 (82%)</td>
</tr>
</tbody>
</table>

$X^2 = 9.4.$

$p < .05$

$\text{TAU B} = .29 \quad p < .01$

Family solidarity and unity differs statistically between the index group and both control groups. Only 41% of the index group families appear to be united and close as a family unit as compared with 76% and 82% from the first and second control groups respectively.

There is a positive correlation between group membership and the quality of family life with the index group displaying the least satisfactory circumstances.

C. PERSONALITY FACTORS

(a) AN ANALYSIS OF THE SIXTEEN PERSONALITY FACTOR TEST.

(SIXTEEN PRIMARY PERSONALITY FACTORS AND SECOND-ORDER FACTORS).

The S.P.S.S. (Statistical package for the social sciences version 8) was applied. The three groups of mothers were categorised according to whether their scores on each of the sixteen variables measured by the test were; high, low or medium. A series of 2 tests revealed no significant
differences in the distribution of the groups' scores on any of the variables (see personality profile). In general, the index and two control groups show a 'normal' pattern of scores when compared with a 'normative' standardisation sample. Second-Order analysis was conducted in the same way and no significant differences in the distribution of the groups scores on any of the variables found (see personality profile).
Table 9.18. Means standard deviations and range of each of sixteen personality factors of Index Group mothers.

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>X</th>
<th>S.D.</th>
<th>RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5.4</td>
<td>1.7</td>
<td>7</td>
</tr>
<tr>
<td>B</td>
<td>6.6</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>C</td>
<td>4.6</td>
<td>2.4</td>
<td>9</td>
</tr>
<tr>
<td>E</td>
<td>5.5</td>
<td>1.9</td>
<td>6</td>
</tr>
<tr>
<td>F</td>
<td>6</td>
<td>1.7</td>
<td>6</td>
</tr>
<tr>
<td>G</td>
<td>4.4</td>
<td>1.9</td>
<td>9</td>
</tr>
<tr>
<td>H</td>
<td>5.4</td>
<td>1.7</td>
<td>6</td>
</tr>
<tr>
<td>I</td>
<td>5.4</td>
<td>1.9</td>
<td>7</td>
</tr>
<tr>
<td>L</td>
<td>6.2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>M</td>
<td>5.5</td>
<td>1.7</td>
<td>6</td>
</tr>
<tr>
<td>N</td>
<td>5.8</td>
<td>1.5</td>
<td>5</td>
</tr>
<tr>
<td>O</td>
<td>5.9</td>
<td>1.6</td>
<td>6</td>
</tr>
<tr>
<td>O1</td>
<td>5.5</td>
<td>1.4</td>
<td>5</td>
</tr>
<tr>
<td>O2</td>
<td>5.4</td>
<td>2</td>
<td>9</td>
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<tr>
<td>O3</td>
<td>5.1</td>
<td>1.7</td>
<td>6</td>
</tr>
<tr>
<td>O4</td>
<td>5.2</td>
<td>1.7</td>
<td>6</td>
</tr>
</tbody>
</table>
Table 9.19 Means standard deviations and range on each of sixteen Personality Factors of Control Group I mothers.

<table>
<thead>
<tr>
<th>Factor</th>
<th>X</th>
<th>S.D.</th>
<th>RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.9</td>
<td>1.9</td>
<td>7</td>
</tr>
<tr>
<td>B</td>
<td>6.3</td>
<td>1.9</td>
<td>8</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>1.8</td>
<td>7</td>
</tr>
<tr>
<td>E</td>
<td>5.3</td>
<td>1.7</td>
<td>5</td>
</tr>
<tr>
<td>F</td>
<td>5.1</td>
<td>1.6</td>
<td>5</td>
</tr>
<tr>
<td>G</td>
<td>4.8</td>
<td>2.1</td>
<td>8</td>
</tr>
<tr>
<td>H</td>
<td>4.9</td>
<td>1.7</td>
<td>6</td>
</tr>
<tr>
<td>I</td>
<td>4.9</td>
<td>1.9</td>
<td>6</td>
</tr>
<tr>
<td>L</td>
<td>6.1</td>
<td>1.8</td>
<td>8</td>
</tr>
<tr>
<td>M</td>
<td>4.7</td>
<td>1.7</td>
<td>6</td>
</tr>
<tr>
<td>N</td>
<td>5.6</td>
<td>1.9</td>
<td>6</td>
</tr>
<tr>
<td>O</td>
<td>5.1</td>
<td>2.1</td>
<td>7</td>
</tr>
<tr>
<td>Q1</td>
<td>5.3</td>
<td>2.1</td>
<td>8</td>
</tr>
<tr>
<td>Q2</td>
<td>5.1</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>Q3</td>
<td>5.6</td>
<td>1.7</td>
<td>7</td>
</tr>
<tr>
<td>Q4</td>
<td>5.2</td>
<td>1.3</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 9.20  Means of standard deviations and range on each of sixteen Personality Factors of Control Group 2 mothers.

<table>
<thead>
<tr>
<th>Factor</th>
<th>X</th>
<th>S.D.</th>
<th>RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5.2</td>
<td>2.1</td>
<td>8</td>
</tr>
<tr>
<td>B</td>
<td>5.4</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>C</td>
<td>5.6</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>E</td>
<td>5.3</td>
<td>2.4</td>
<td>9</td>
</tr>
<tr>
<td>F</td>
<td>5.1</td>
<td>1.6</td>
<td>5</td>
</tr>
<tr>
<td>G</td>
<td>4.8</td>
<td>1.6</td>
<td>6</td>
</tr>
<tr>
<td>H</td>
<td>5.2</td>
<td>1.8</td>
<td>8</td>
</tr>
<tr>
<td>I</td>
<td>4.8</td>
<td>2.3</td>
<td>8</td>
</tr>
<tr>
<td>L</td>
<td>5.5</td>
<td>1.2</td>
<td>5</td>
</tr>
<tr>
<td>M</td>
<td>5.1</td>
<td>1.8</td>
<td>6</td>
</tr>
<tr>
<td>N</td>
<td>5.5</td>
<td>1.5</td>
<td>5</td>
</tr>
<tr>
<td>O</td>
<td>5.7</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Q1</td>
<td>6</td>
<td>1.8</td>
<td>7</td>
</tr>
<tr>
<td>Q2</td>
<td>5.7</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Q3</td>
<td>5.6</td>
<td>1.5</td>
<td>5</td>
</tr>
<tr>
<td>Q4</td>
<td>5.1</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>FACTOR</td>
<td>Standard Score</td>
<td>Low Score Description</td>
<td>Standard Ten Score (Sten)</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>-----------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>A</td>
<td>4.9</td>
<td>Reserved, detached, critical, aloof (Schizothymia)</td>
<td>5.2</td>
</tr>
<tr>
<td>B</td>
<td>6.3</td>
<td>Less intelligent, concrete, thinking (Lower scholastic mental capacity)</td>
<td>5.4</td>
</tr>
<tr>
<td>C</td>
<td>5.6</td>
<td>Affected by feelings, emotion; ALL LESS STABLE, EASILY UPSET (Lower ego strength)</td>
<td>5.0</td>
</tr>
<tr>
<td>D</td>
<td>5.3</td>
<td>Humble, mild, accommodating; conforming (Submissive)</td>
<td>5.3</td>
</tr>
<tr>
<td>E</td>
<td>5.1</td>
<td>Sober, prudent, serious; taciturn (Despair)</td>
<td>5.4</td>
</tr>
<tr>
<td>F</td>
<td>4.8</td>
<td>Expedient, disregards rules, feels few obligations (Weak super ego strength)</td>
<td>5.4</td>
</tr>
<tr>
<td>G</td>
<td>4.9</td>
<td>Shy, restrained, timid; threat sensitive (Terror)</td>
<td>5.2</td>
</tr>
<tr>
<td>H</td>
<td>5.4</td>
<td>Tough-minded, self-reliant, realistic, no nonsense (Harriga)</td>
<td>5.5</td>
</tr>
<tr>
<td>I</td>
<td>4.9</td>
<td>Trusting, adaptable, free of jealousy, easy to get along with (Alaxia)</td>
<td>5.4</td>
</tr>
<tr>
<td>L</td>
<td>6.1</td>
<td>Practical, careful, conventional, regulated by external realities, proper (Praxeria)</td>
<td>5.4</td>
</tr>
<tr>
<td>M</td>
<td>5.9</td>
<td>Forthright, natural, artless, unpretentious (Artiness)</td>
<td>5.5</td>
</tr>
<tr>
<td>N</td>
<td>6.6</td>
<td>Self-assured, confident, serene (Untroubled adequacy)</td>
<td>5.5</td>
</tr>
<tr>
<td>O</td>
<td>5.4</td>
<td>Conservative, respecting established traditions, tolerant of traditional difficulties (Conservatism)</td>
<td>5.7</td>
</tr>
<tr>
<td>Q1</td>
<td>5.3</td>
<td>Group-dependent, a “joiner,” and sound follower (Group adherence)</td>
<td>5.6</td>
</tr>
<tr>
<td>Q2</td>
<td>5.4</td>
<td>Undisciplined self-conflict, follows own impulses, careless of protocol (Low integration)</td>
<td>5.4</td>
</tr>
<tr>
<td>Q3</td>
<td>5.6</td>
<td>Relaxed, tranquil, unruffled (Low erogenic tension)</td>
<td>5.6</td>
</tr>
</tbody>
</table>

A sten of 10 is obtained when INDEX GROUP evaluated as a

{Table} 9.12

{Graph} 2.39

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Table 9.21 Means, standard deviations and range of four second order scores of Index Group mothers, Control Group 1 and Control Group 2.

**INDEX GROUP**

<table>
<thead>
<tr>
<th>Factor</th>
<th>X</th>
<th>S.D.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>5.8</td>
<td>1.4</td>
<td>4.9</td>
</tr>
<tr>
<td>II</td>
<td>5.6</td>
<td>2.1</td>
<td>7.9</td>
</tr>
<tr>
<td>III</td>
<td>5.1</td>
<td>2.2</td>
<td>8.2</td>
</tr>
<tr>
<td>IV</td>
<td>5.6</td>
<td>1.4</td>
<td>5.6</td>
</tr>
</tbody>
</table>

**CONTROL GROUP 1**

<table>
<thead>
<tr>
<th>Factor</th>
<th>X</th>
<th>S.D.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>5.5</td>
<td>1.4</td>
<td>5.3</td>
</tr>
<tr>
<td>II</td>
<td>5</td>
<td>1.9</td>
<td>8.1</td>
</tr>
<tr>
<td>III</td>
<td>6</td>
<td>1.5</td>
<td>7.2</td>
</tr>
<tr>
<td>IV</td>
<td>5.2</td>
<td>2.3</td>
<td>7.8</td>
</tr>
</tbody>
</table>

**CONTROL GROUP 2**

<table>
<thead>
<tr>
<th>Factor</th>
<th>X</th>
<th>S.D.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>5.2</td>
<td>1.6</td>
<td>6.5</td>
</tr>
<tr>
<td>II</td>
<td>4.9</td>
<td>2.3</td>
<td>8.6</td>
</tr>
<tr>
<td>III</td>
<td>6</td>
<td>1.8</td>
<td>6.4</td>
</tr>
<tr>
<td>IV</td>
<td>5.4</td>
<td>1.7</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>C0</td>
<td>C0.5</td>
<td>C0.9</td>
</tr>
<tr>
<td>----------------------</td>
<td>----</td>
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</tr>
<tr>
<td></td>
<td>III</td>
<td>IV</td>
<td>V</td>
</tr>
<tr>
<td>Independence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cold Rationale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Anxiety</td>
<td></td>
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<td></td>
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<tr>
<td>Description</td>
<td></td>
<td></td>
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<tr>
<td>High Score</td>
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<tr>
<td>Sten Score</td>
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</table>

<table>
<thead>
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<th>C0</th>
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<th>C0.9</th>
<th>C0.95</th>
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<tr>
<td></td>
<td>VII</td>
<td>VIII</td>
<td>IX</td>
<td></td>
</tr>
<tr>
<td>Subduence</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
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<td>0.9</td>
<td>0.9</td>
<td></td>
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<tr>
<td>Tenderness</td>
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<td>1.8</td>
<td>1.8</td>
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<tr>
<td>Intrusion</td>
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<td>0.5</td>
<td>0.5</td>
<td></td>
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<tr>
<td>Low Anxiety</td>
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<td>5.3</td>
<td>8.5</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16 P.F. Test Profile.
### Table 9.23 Summary of Neuroticism and Extraversion Personality Scores.

#### Neuroticism (N)

<table>
<thead>
<tr>
<th></th>
<th>Index</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>16</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>S.D.</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>R</td>
<td>13</td>
<td>18</td>
<td>20</td>
</tr>
</tbody>
</table>

#### Extroversion (E)

<table>
<thead>
<tr>
<th></th>
<th>Index</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>12</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>S.D.</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>R</td>
<td>13</td>
<td>12</td>
<td>21</td>
</tr>
</tbody>
</table>

N.S.

The index group does not differ (at a statistical level of significance from the control groups on N or E). Their N scores (on average) fit better with scores obtained by neurotics (standardisation sample) rather than 'normals'. However, there is much overlap in the scores of normals and neurotics.
(c) FINDINGS ON ANXIETY

Table 9.24 Individual scores on trait and State anxiety for the mothers of the Index Children and the Mothers of the Control Group Children.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Index Group A-STATE</th>
<th>Index Group A-TRAIT</th>
<th>Control Group 1 A-STATE</th>
<th>Control Group 1 A-TRAIT</th>
<th>Control Group 2 A-STATE</th>
<th>Control Group 2 A-TRAIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>36</td>
<td>40</td>
<td>48</td>
<td>32</td>
<td>40</td>
<td>32</td>
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<tr>
<td>2</td>
<td>58</td>
<td>36</td>
<td>54</td>
<td>50</td>
<td>59</td>
<td>64</td>
</tr>
<tr>
<td>3</td>
<td>50</td>
<td>61</td>
<td>41</td>
<td>37</td>
<td>34</td>
<td>41</td>
</tr>
<tr>
<td>4</td>
<td>48</td>
<td>44</td>
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<td>24</td>
</tr>
<tr>
<td>5</td>
<td>47</td>
<td>52</td>
<td>33</td>
<td>38</td>
<td>42</td>
<td>36</td>
</tr>
<tr>
<td>6</td>
<td>46</td>
<td>52</td>
<td>45</td>
<td>36</td>
<td>51</td>
<td>39</td>
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<tr>
<td>7</td>
<td>46</td>
<td>29</td>
<td>44</td>
<td>33</td>
<td>35</td>
<td>37</td>
</tr>
<tr>
<td>8</td>
<td>46</td>
<td>29</td>
<td>41</td>
<td>44</td>
<td>45</td>
<td>43</td>
</tr>
<tr>
<td>9</td>
<td>59</td>
<td>38</td>
<td>55</td>
<td>60</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>10</td>
<td>65</td>
<td>70</td>
<td>38</td>
<td>34</td>
<td>47</td>
<td>48</td>
</tr>
<tr>
<td>11</td>
<td>42</td>
<td>58</td>
<td>41</td>
<td>35</td>
<td>31</td>
<td>35</td>
</tr>
<tr>
<td>12</td>
<td>35</td>
<td>22</td>
<td>59</td>
<td>44</td>
<td>32</td>
<td>31</td>
</tr>
<tr>
<td>13</td>
<td>44</td>
<td>54</td>
<td>40</td>
<td>34</td>
<td>38</td>
<td>36</td>
</tr>
<tr>
<td>14</td>
<td>41</td>
<td>48</td>
<td>69</td>
<td>71</td>
<td>38</td>
<td>30</td>
</tr>
<tr>
<td>15</td>
<td>58</td>
<td>45</td>
<td>42</td>
<td>40</td>
<td>45</td>
<td>44</td>
</tr>
<tr>
<td>16</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>40</td>
<td>34</td>
<td>39</td>
</tr>
<tr>
<td>17</td>
<td>42</td>
<td>49</td>
<td>37</td>
<td>30</td>
<td>39</td>
<td>34</td>
</tr>
</tbody>
</table>
COMPARISONS OF SCORES ON STATE ANXIETY

t-tests were performed between:

a. Index Group and Control Group 1

\[ t = 0.56 \]

N.S.

Mothers of Index Group children do not differ from the mothers of ill children on State anxiety.

b. Index Group and Control Group 2

\[ t = 2.4 \]

p, .02 (2 tailed test)

The mothers of the Index Group children are significantly more anxious than the mothers of the Second Control Group children (viz "normal" group) It would suggest that the Index Group mothers react more quickly and worryingly to stress situations than the mothers of the 'normal' sample of children.

c. Control Group 1 and Control Group 2

\[ t = 1.7 \]

N.S.

There is no significant difference between these two groups of mothers in the way they react to stress situations.
COMPARISONS OF SCORES ON TRAIT ANXIETY TESTS WERE PERFORMED BETWEEN:

a. Index Group and Control Group 1

\[ t = 0.95 \]

N.S.

Mothers of Index Group children do not differ from the mothers of ill children on Trait anxiety.

b. Index Group and Control Group 2

\[ t = 1.9 \]

\[ p < 0.06 \] (2 tailed tests)

There is only a marginal difference (i.e., approaching a satisfactory statistical level) in the way mothers generally react to various situations (viz mothers of Index children are more anxious in a generalised and persistent way than mothers of 'normal' children).

c. Control Group 1 and Control Group 2

\[ t = 1.02 \]

N.S.

There is no significant difference between these two groups of mothers in general reactivity level.
SUMMARY OF TRAIT AND STATE ANXIETY SCORES

Table 9.25 Means, Standard Deviation and Range of each group on Trait Anxiety.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Index Group</th>
<th>Control Group 1</th>
<th>Control Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>45</td>
<td>41</td>
<td>37</td>
</tr>
<tr>
<td>S.D.</td>
<td>13</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>R</td>
<td>48</td>
<td>41</td>
<td>67</td>
</tr>
</tbody>
</table>

Although index group mothers do not differ significantly from control group mothers on State and Trait anxiety, the distribution of their scores is closer to that of anxious psychiatric patients than 'normals' (standardisation data). Once again, it has to be recognised, that there is much overlap between the scores of psychiatric and 'normal' standardisation samples.
Table 9.27 A correlation Coefficient was worked out in order to measure the degree of association between Trait Anxiety and Neuroticism for the Index Group mothers.

<table>
<thead>
<tr>
<th>Case number</th>
<th>Eysenck Neuroticism</th>
<th>Spielberger Trait-Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>21</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>61</td>
</tr>
<tr>
<td>4</td>
<td>19</td>
<td>44</td>
</tr>
<tr>
<td>5</td>
<td>19</td>
<td>52</td>
</tr>
<tr>
<td>6</td>
<td>14</td>
<td>52</td>
</tr>
<tr>
<td>7</td>
<td>14</td>
<td>29</td>
</tr>
<tr>
<td>8</td>
<td>14</td>
<td>29</td>
</tr>
<tr>
<td>9</td>
<td>14</td>
<td>38</td>
</tr>
<tr>
<td>10</td>
<td>18</td>
<td>70</td>
</tr>
<tr>
<td>11</td>
<td>16</td>
<td>58</td>
</tr>
<tr>
<td>12</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>13</td>
<td>18</td>
<td>54</td>
</tr>
<tr>
<td>14</td>
<td>10</td>
<td>48</td>
</tr>
<tr>
<td>15</td>
<td>21</td>
<td>45</td>
</tr>
<tr>
<td>16</td>
<td>8</td>
<td>35</td>
</tr>
<tr>
<td>17</td>
<td>19</td>
<td>49</td>
</tr>
</tbody>
</table>

$r = 0.44$ $p<.01$

The tests appear to be measuring substantially similar aspects of personality.
(D) Attachment

Findings were based upon structured interviews concerning attachment behaviour and child rearing attitudes, the latter was broadly based on Sears, Macowby and Levin questionnaire where relevant.

ATTACHMENT
(Ratings of structured questionnaire)

Table 9.28 The mother's sense of her child belonging to her.

<table>
<thead>
<tr>
<th>Group</th>
<th>Strong</th>
<th>Moderate</th>
<th>Weak</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 12.6 \]

\[ p < 0.01 \]

The differences in the sense of belonging between three groups reach a high level of statistical significance. The highest proportion of those mothers reporting disturbance or weakness in the sense of belonging appearing in the mothers of failure-to-thrive children.
Table 9.29 Did the mother see the baby immediately after birth?

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>4</td>
</tr>
</tbody>
</table>

N.S.

There are no significant differences between groups with regard to seeing the neonate after the delivery.

Table 9.30 Were the feelings positive towards the child just after birth?

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>

N.S.

No reliable differences emerge from this item.
Table 9.31. The mother found the baby lovable; he or she giving her a lot of pleasure.

<table>
<thead>
<tr>
<th>Group</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

\[X^2 = 14.71\]

\[p < 0.005\]

The difference between groups are in the direction of large numbers of control group mothers finding frequent pleasure in the baby as compared with failure-to-thrive mothers. As many as fifty-nine percent of the latter never or only sometimes found the child lovable and pleasureable.

Table 9.32. The mother spends a lot of time with a child besides regular care.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

\[X^2 = 10.5\]

\[p < 0.005\]

There is a statistically significant trend for the failure-to-thrive mothers to report spending less time than the control mothers in situations outside the routine/regular care-giving tasks.
Table 9.33 The mother seldom picks up, smiles at and talks to the baby.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>17</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 7.9 \]

\[ p < 0.02 \]

There is a statistically significant tendency for mothers in the failure-to-thrive group to spend less time than the mothers in the control group, picking up, smiling and talking to the baby.

Table 9.34 The mother enjoys picking up, smiling at and talking to the baby.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 13.1 \]

\[ p < 0.01 \]

There appears to be some internal consistency in the response to the questions about attachment (bonding) behaviour such as picking up, smiling at, and vocalising to the baby. The failure-to-thrive group report less enjoyment in these activities than the controls, a finding consistent with that reported in table 9.33 where they indulge less in these acts.
Table 9.35. The baby enjoys being picked up by the mother, being cuddled and talked to.

<table>
<thead>
<tr>
<th>Group</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

N.S.

When it comes to the mother's perception of whether the child enjoys such activities there is a tendency for failure-to-thrive children to be reported as ambiguous in response, but the difference does not reach a substantial level of significance.

Table 9.36. The mother describes herself as a demonstrative person showing affection towards the child.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>16</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

$\chi^2 = 9.5$

$p < 0.05$

There appears to be a significant difference between the failure-to-thrive mothers and the two control groups in expressing affection towards their children. It appears that failure-to-thrive mothers are not so demonstrative which might reflect that their children do not receive the amount of warmth in their interaction as the children from the two control groups.
Table 9.37 The baby is described as a demonstrative child showing affection towards the mother.

<table>
<thead>
<tr>
<th>Group</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 11.3 \]

\[ p < 0.02 \]

It would appear that failure-to-thrive children show less affection in the course of the mother-child interaction (e.g. cuddliness) in comparison with the two control groups, which show little difference between themselves on this variable.

Table 9.38 Mother feels that she should pick up a baby when he cries.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>15</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 10.5 \]

\[ p < 0.005 \]

There is a significant difference in maternal attitudes with regard to picking up a baby when it cries. The failure-to-thrive group shows a total consensus (one hundred percent) that mothers should not pick up the infant. Control Group 1 (organic failure-to-thrive) (fifty-nine percent) answered in that way; there was a general agreement with both control groups (ninety-two percent) that the baby should not be picked up.
Table 9.39 The mother will let the baby cry for a long time.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>14</td>
<td>0</td>
</tr>
</tbody>
</table>

Χ² = 11.9
p < 0.02

There is a significant difference in allowing a child to cry for a long time between three groups. Most common is the reporting of mothers of organic failure-to-thrive (ill children) that they will never let their babies cry for a long time (one hundred percent). The failure-to-thrive mothers are more willing to let a baby cry for a long time than both of the control groups.

Table 9.40 The baby preferred to be with other people than with the mother.

<table>
<thead>
<tr>
<th>Group</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>

N.S.

There is no significant difference between the groups on this variable.
Table 9.41 The mother thinks babies are more interesting when they are older.

<table>
<thead>
<tr>
<th>Group</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

N.S.

There is no significant difference regarding the child's age in mother's perception between three groups.

Table 9.42 The mother and child get on each other's nerves.

<table>
<thead>
<tr>
<th>Group</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>11</td>
<td>6</td>
</tr>
</tbody>
</table>

$X^2 = 10.9$

$p < 0.03$

There is an interesting significant difference between organic failure-to-thrive (ill children) (first control group) and failure-to-thrive mothers and children and the second control group. Organic failure-to-thrive mothers and children seventy-five percent almost never irritate each other while non organic failure-to-thrive and second control group appear to have more confrontations with their children.
Table 9.43 The mother plays with the child simply for pleasure it gives her (not as a duty).

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

$X^2 = 16.4$

$p < 0.002$

The difference in the groups are in the direction of a large number of control group mothers finding pleasure in playing with their children as compared with the failure-to-thrive mothers. As many as eighty percent of the latter do not or only occasionally play with their children for their own pleasure.

Table 9.44. When the child asks for help mother will help him even though she knows he can do it himself.

<table>
<thead>
<tr>
<th>Group</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

There is no significant difference from this item.
Table 9.45  Mother feels that everyone at home would be happier if she had not had her child.

<table>
<thead>
<tr>
<th>Group</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>0</td>
<td>16</td>
</tr>
</tbody>
</table>

χ² = 13.2
p < 0.01

The difference whether everyone at home would feel better if she had not had her child between the three groups reach a high level of statistical significance with the highest proportion of mothers of failure-to-thrive children reporting adverse effects on family life because of the child.

Table 9.46  The child brings much aggravation.

<table>
<thead>
<tr>
<th>Group</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>

N.S.

When it comes to the mother’s perception of whether the child brings much aggravations to her there is a tendency for failure-to-thrive mothers to feel that way, but the differences do not reach statistical level of significance.
Mother found her child hard to love.

<table>
<thead>
<tr>
<th>Group</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
</tbody>
</table>

$X^2 = 13.20$

$p < 0.01$

A high statistical level of difference between the groups was reached on this item. As many as forty-one percent of mothers of failure-to-thrive children reported difficulties in loving their children, while none of the mothers from both control groups reported such feelings.

The mother describes her present attitude towards the child as positive.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>16</td>
<td>1</td>
</tr>
</tbody>
</table>

$X^2 = 12.75$

$p < 0.001$

There is a statistically significant tendency for the mothers in the failure-to-thrive group to feel negatively about their children (forty-one) percent than the mothers on both control groups.
Table 9.49 (Brief separation) Day Care arranged for general reasons but mainly to provide added stimulation.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>1 child in foster home</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

$X^2 = 6.5$

$p < 0.03$

There are significant differences between the groups regarding placement in the day nursery as a result of poor stimulation at home. Fifty percent of failure-to-thrive children needed day care in this respect. Fifty-five percent of organic failure-to-thrive was placed for extra stimulation, while only twelve percent of the second group.

*Footnote: Table in E & F are somewhat artificial as they are, in part, a function of my intervention.
Table 9.50  Child separated (day care arranged) because of poor mother-child relationship.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>16</td>
</tr>
</tbody>
</table>

1 child in foster home

\[ x^2 = 22.1 \]

\[ p < 0.001 \]

The difference in mother-child relationship and need for day care between three groups reach a high level of statistical differences with the highest proportion (sixty-two percent) of those mothers reporting serious disturbances in their relationship with the children appearing in the failure-to-thrive group. Three out of ten had emergency day care placement because of acute rejection.

Table 9.51  Child separated from his mother legally (Care Order) or giving up child for adoption.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>17</td>
</tr>
</tbody>
</table>

\[ x^2 = 6.4 \]

\[ p < 0.04 \]

Statistical level of significance reached in this item between three groups. Legal procedures had to take place in three failure-to-thrive cases; two because of physical abuse and in one case the mother willingly gave up her child for adoption.
F. 'AT RISK' REGISTER

Table 9.52 Children on At Risk register because of poor mother-child relationship and interaction also because of poor growth and development.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>17</td>
</tr>
</tbody>
</table>

p<0.0000

A high level of statistical significance between three groups has been reached in placing a child on the register. Fifty-nine percent of failure-to-thrive children were put on the 'At Risk' register, while none from both control groups.

G. FATHER-CHILD INTERACTION

Table 9.53. The father plays an active role as a care-taker.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>8 2 fathers not at home</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>10 1 father not at home</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>

N.S.

There is no significant difference in this item. There is some tendency in the fathers of organic failure-to-thrive children (ill children) to participate less in everyday care-taking; unlike the non organic failure-to-thrive and the second control group fathers.
Table 9.54  The father often picks up, plays with and talks to the child.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>3</td>
</tr>
</tbody>
</table>

$X^2 = 7.7$

$p < 0.02$

The fathers of failure-to-thrive children pick them up, talk and play with them far less than the fathers from the two control groups. It would appear that the father’s physical contact with the child is less frequent in comparison with the two control groups.

Table 9.55  Father’s attitude towards the child is positive.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>16</td>
<td>1</td>
</tr>
</tbody>
</table>

N.S.

There are no significant differences between the groups in this item.
Table 9.56  Child shows affection towards father.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\(X^2 = 13.3\)

\(p < 0.01\)

It would appear that index group children show less affection towards their fathers. Twenty-five percent never show affection towards their fathers and twelve percent demonstrate affection only occasionally. The lack of affection was not demonstrated in neither of the control groups.

H. FEEDING

Table 9.57  The mother found the baby easy to feed.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Varied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

\(X^2 = 16.2\)

\(p < 0.03\)

The difference in this item reached a statistical level of significance between the groups. Index children showed more difficulties in feeding. As many as eighty-two percent of mothers of failure-to-thrive children found the child difficult to feed whilst forty-three percent of the first control group and only seventeen percent in the second control group.
Table 9.58 Baby was breast fed.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

N.S.

No significant differences found in whether baby was breast fed or bottle fed. There is a general tendency in all groups to bottle feed. The largest proportion of mothers of failure-to-thrive infants eighty-eight percent preferring to bottle feed.

Table 9.59 The mother wanted to breast feed the baby.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>

N.S.

No significant statistical level of difference reached in this item. However, the findings indicate that as many as fifty-nine percent of the first control group mothers wanted to breast feed their children but were unable to do so, because of the child's illness and long periods of time they had to spend in hospital. Only one mother from the second control group was unable to breast feed her baby.
Table 9.60 The mother kept to a regular feeding schedule for the baby.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>5</td>
</tr>
</tbody>
</table>

N.S.

No significant differences are reached here. There is however, a trend towards more flexible feeding routine and disorganised routine in mothers of failure-to-thrive children.

Table 9.61 The mother experienced problems with baby not eating enough.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>11</td>
<td>4</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 14.6 \]

\( p < 0.06 \)

There is no significant statistical difference between the groups on food refusal or limited amount of food eaten. As many as seventy-six percent of children of failure-to-thrive children presented acute and severe eating problems. The first control group manifested food refusal in forty-seven percent, while twelve percent only in the second control group.
Table 9.62  The mother experiences problems with baby not eating the foods he needed.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>10</td>
<td>4</td>
</tr>
</tbody>
</table>

\[ X^2 = 10.3 \]
\[ p < 0.03 \]

There are significant differences between the groups in children's faddiness to food. Seventy percent of failure-to-thrive children showed persistent fussing and dislikes to varieties of food offered, while only twenty-three percent would take most food which was given. Both control groups showed the same occasional twenty-three percent. First control group demonstrated forty-one percent of persistent fussing while only seventeen percent of the second control group.

Table 9.63  The mother looked forward to feeding baby as then she could hold him close in her arms

<table>
<thead>
<tr>
<th>Group</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

N.S.

No significant level of statistical differences reached in this item. It would appear that majority of mothers were looking forward to feeding the child, at an early stage so that they could experience closeness between each other. There is some tendency in mothers of failure-to-thrive children to dread feeding time, because of acute feeding difficulties.
The mother feels that the toilet training is important to teach from an early age.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>11</td>
</tr>
</tbody>
</table>

N.S.

The mother's statements regarding the importance of toilet training has not reached significant level of statistical differences. Majority of mothers do not seem to pay a lot of attention to the importance of early toilet training.

Mother was persistent and strict in carrying out toilet training.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>14</td>
</tr>
</tbody>
</table>

N.S.

No significant level of statistical differences reached on this item. Most mothers were not strict in toilet training.

Footnote* The tables might not always show 17 subjects because of age, circumstances or no information available.
Discipline and Handling Child's Behaviour

Table 9.66 The mother had special rules as to what the child can or cannot do.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>1</td>
</tr>
</tbody>
</table>

N.S.

No significant differences between the groups were shown regarding the set of rules and discrimination. A large number of mothers had certain rules as to how the child should behave. The largest proportion of mothers of second control group expressed this view, ninety-three percent, while highest proportion of mothers forty percent of failure-to-thrive children did not have specific rules.
Table 9.67 The child has freedom to play

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

$X^2 = 12.3$

$p < 0.02$

Significant level of statistical differences are shown in this item. Only some failure-to-thrive children experience restrictions in play, while none of the control groups.

Table 9.68 The mother expects her child to be immediately obedient.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>11</td>
<td>0</td>
</tr>
</tbody>
</table>

N.S.

No significant differences have been reached on this item, between the groups. Four mothers of failure-to-thrive children expressed strong view that child should comply immediately with her request. None of the first control group mothers felt like that, and two of the second control group felt strongly about immediate obedience.
Table 9.69  The child often gets angry with his parents.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

N.S.

No statistical level of significance has been reached between the groups. However, mothers of the failure-to-thrive children felt that the child gets often frustrated with his parents.

Table 9.70  The parents punish their child for outbursts of anger.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

N.S.

No significant level of statistical difference reached on this question, but it would appear that parents of failure-to-thrive children punish the child more often when he gets angry.
Table 9.71 Parents have many problems with the child's outbursts of anger.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>9</td>
<td>1</td>
</tr>
</tbody>
</table>

N.S.

No significant differences are reached in this item. However, a greater proportion of mothers of failure-to-thrive children felt that the child showed frequent outbursts of anger.

Table 9.72 The parents punish the child severely.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Seldom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>15</td>
<td>0</td>
</tr>
</tbody>
</table>

N.S.

No significant level of statistical differences has been reached at this item. But it is important to mention that two failure-to-thrive children have been severely physically abused as a means of punishment and one child has been occasionally punished quite severely. None of the children from both control groups have ever been punished severely.
Table 9.73  The child is spanked by the mother

<table>
<thead>
<tr>
<th>Group</th>
<th>Frequently</th>
<th>Almost Never</th>
<th>Seldom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

$X^2 = 19.5$

$p < 0.006$

There are some significant differences between the groups on this question. Fifty percent of mothers of failure-to-thrive children spank the child frequently which indicates mother-child confrontation. Only one mother from the first control group and two from the second control group stated frequent spanking. The largest proportion of mothers (eighty-one percent) of first control group almost never spank the child.

Table 9.74  The child is spanked by the father.

<table>
<thead>
<tr>
<th>Group</th>
<th>Frequently</th>
<th>Almost Never</th>
<th>Seldom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

$X^2 = 12.99$

$p < 0.01$

The difference with father spanking the child between the three groups reach a high level of statistical differences. Most fathers from the three groups almost never spanked the child frequently but three fathers from the failure-to-thrive children spanked the child frequently while none from the control groups.
The child becomes angry when he is spanked.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>9</td>
<td>1</td>
</tr>
</tbody>
</table>

N.S.

No statistical level of significance has been reached between the groups. However forty-six percent of mothers of failure-to-thrive children said that the child did become angry when spanked compared with eighteen percent and twenty-three percent of mothers from the first and second control groups respectively.

The parents think that spanking is effective.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

\[X^2 = 11.4\]

\[p < 0.02\]

There are significant differences between the groups in this question. As many as eighty percent of mothers of failure-to-thrive children said spanking is ineffective, compared with thirty-one percent and twenty-five percent from the first and second control group respectively.
Table 9.77 The mother deprives the child of something as a means of discipline.

<table>
<thead>
<tr>
<th>Group</th>
<th>Frequently</th>
<th>Seldom</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>8</td>
<td>2</td>
</tr>
</tbody>
</table>

N.S.

No statistical level of significance has been reached between the groups. The highest proportion of mothers depriving the child of something as a means of discipline are from the failure-to-thrive children. However, this is not significantly high if we compare results from the second control group.

Table 9.78 The mother scolds her child

<table>
<thead>
<tr>
<th>Group</th>
<th>Frequently</th>
<th>Seldom</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

$X^2 = 12.62$

$p < 0.01$

There is a statistically significant outcome for mothers of failure-to-thrive children to scold children frequently, compared with mothers from both control groups.
Table 9.79  The mother is consistent in handling the child.

<table>
<thead>
<tr>
<th>Group</th>
<th>Usually</th>
<th>Seldom</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>

\[X^2 = 14.82\]

\[p < .005\]

There are significant differences between the groups on this question. Only one mother of failure-to-thrive children handled the child consistently compared with seventeen percent and forty-seven percent from the first and second control groups respectively.

Table 9.80  Father disciplines the child if necessary

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

\[X^2 = 8.73\]

N.S.

No statistical level of significance has been reached between the groups. However, fathers of failure-to-thrive children do not get involved in disciplining the child unlike fathers from the control groups.
Table 9.81  Father is strict with the child

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

N.S.

No statistical level of significance has been reached between the groups.

Table 9.82  The parents agree about disciplining the child

<table>
<thead>
<tr>
<th>Group</th>
<th>Usually</th>
<th>Seldom</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

\[ X^2 = 10.87 \]
\[ p < .03 \]

There is a statistically significant level for parents of failure-to-thrive children to argue about disciplining the child. Twenty-one percent of parents of failure-to-thrive children disagree with each other unlike seventy-two and seventy-six percent from the first and second control groups respectively.
Table 9.83 The father thinks that mother is too strict with the child.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

N.S.

It appears that a greater proportion of fathers of failure-to-thrive children thought that the mother was too strict with the child compared with the two control groups. There is a trend but not significant differences between the groups.

Table 9.84 The mother thinks that the father is too strict with the child.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>10</td>
<td>3</td>
</tr>
</tbody>
</table>

N.S.

There are no significant differences between the results.
Main decisions concerning the child are made by the mother.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>

N.S.

There are no significant differences between the results. However, as many as sixty-four percent of mothers of failure-to-thrive children made most of the decisions compared with forty-one and twenty-nine percent of mothers from first and second control groups respectively.

The major decisions regarding the child are made by the father.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>17</td>
</tr>
</tbody>
</table>

N.S.

There are no significant differences between these results.
RELATIONSHIPS WITH SIBLINGS AND OTHER CHILDREN

Table 9.87  The child gets on well with siblings.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\[X^2 = 9.17\]

\[p < 0.05\]

It appears more children of failure-to-thrive group do not get on with their siblings compared with both control groups. Forty-two percent of failure-to-thrive children are reported not to get on with their siblings compared with nine percent and zero percent in the first and second control groups respectively.

Table 9.88  The mother sorts out fights between children justly and shows no preference.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

\[X^2 = 8.78\]

\[p < 0.01\]

There is a significant statistical level of mothers of failure-to-thrive children showing preferences towards their other children during fights. As many as sixty-seven percent of mothers of failure-to-thrive children said they showed preferences towards their other children other than the sick one, compared with eleven and fourteen percent of mothers from the first and second control groups respectively.
There is no statistical level of significance in this question. However, forty-three percent of mothers of failure-to-thrive children said they did not praise the child when they behaved well, compared with eleven and ten percent of mothers from first and second control groups respectively.

There is a trend in mothers of failure-to-thrive children to dislike being at home and bringing up the children. Forty-one percent. Thirty-five percent of them were uncertain and only twenty-three percent enjoyed doing it. Most mothers from both control groups were satisfied with their tasks and lives.
Table 9.91 The mother wanted a family.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>0</td>
</tr>
</tbody>
</table>

N.S.

No significant statistical differences have been reached on whether the mother wanted a family or not. Most mothers stated they wanted a family.

Table 9.92 Mother worked before having a family.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>2</td>
</tr>
</tbody>
</table>

N.S.

There is no significant difference in this item. Most mothers from all groups had worked before having a baby.

Table 9.93 The mother enjoyed working.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>1</td>
</tr>
</tbody>
</table>

N.S.

No statistical level of significance has been reached on whether the mother enjoyed her work. It would appear that most mothers did.
Table 9.94 The mother is resentful towards her new responsibilities.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>13</td>
<td>3</td>
</tr>
</tbody>
</table>

$x^2 = 12.44$

$p < 0.01$

A high level of statistical differences reached on mothers being resentful towards her new responsibilities. Two mothers of the failure-to-thrive children stated constant resentment towards the new responsibilities and nine occasionally felt resentful. One of each control group stated definite resentment but only one occasional dislike in the first control group and three in the second control group.

Table 9.95 The mother's parents were strict.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

N.S.

No statistical level of significance was reached on whether the mothers parents were strict with her or not.
Father's parents were strict

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>15</td>
<td>0</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 12.32 \]

\[ p < .01 \]

A high level of statistical difference was reached in the way the father was disciplined by his parents. All of the second control group fathers stated their parents were not strict with them. While the answers were mixed regarding the fathers of failure-to-thrive children and first control group. Fifty percent of both groups stated strictness in upbringing and fifty percent stated no strictness.

The mother is bringing up her children in a similar way.

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>

N.S.

There are no significant differences between the groups. It appears mothers do not bring their children up in a similar way to the way that they were brought up.
Table 9.98  Pregnancy

<table>
<thead>
<tr>
<th>Group</th>
<th>Relaxed</th>
<th>Distressed</th>
<th>Group</th>
<th>Wanted child</th>
<th>Unwanted child</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 (29%)</td>
<td>12 (71%)</td>
<td>1</td>
<td>11 (65%)</td>
<td>6 (35%)</td>
</tr>
<tr>
<td>2</td>
<td>9 (53%)</td>
<td>8 (47%)</td>
<td>2</td>
<td>13 (76%)</td>
<td>4 (24%)</td>
</tr>
<tr>
<td>3</td>
<td>14 (82%)</td>
<td>3 (18%)</td>
<td>3</td>
<td>17 (100%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

χ²=9.66  \( p<0.01 \)  \( \chi^2=6.97 \)  \( p=0.05 \)

There are significant statistical differences regarding pregnancy between the group. The mothers of non-organic failure-to-thrive being most disadvantaged in this respect.

The individual scores regarding the pregnancy indicate seventy-one percent of distressed pregnancies in the case of the mothers of the index group children, compared with forty-seven percent and eighteen percent of the first and second control groups respectively. Relaxed pregnancy was experienced by only twenty-nine percent of the index mothers but by as many as eighty-two percent of the second control group.

There are substantial differences between the groups in respect of wanted or unwanted pregnancies. Perhaps not surprisingly in the light of the above findings, the highest proportion of unwanted children thirty-five percent are those of the index group, in comparison with twenty-four and zero percent of the first and second control groups respectively.
There are no significant statistical differences between the groups regarding the timing of arrival of the child. These figures show that a large proportion of children from the three groups arrived on time (eighty-two percent, seventy-six percent, ninety-four percent). Only twelve percent of the index group children were premature in comparison with eighteen percent of the first control group and with six percent of the second control group.

No significant statistical differences have been reached between the groups on the type of birth. The results indicate that ninety-four percent of children from the failure-to-thrive group had a normal delivery (no complications) compared with fifty-nine percent from the first control group and seventy-six percent from the second control group.
There are no significant statistical differences between the groups in length of labour. However, what is interesting to point out is that only twelve percent of the mothers of the failure-to-thrive children had a long labour in comparison with thirty-five percent from the first control group and twenty-nine percent from the second control group.

Table 9.102 Post birth factors.

<table>
<thead>
<tr>
<th>Group</th>
<th>In special care baby unit</th>
<th>Breathing difficulties</th>
<th>Other Problems</th>
<th>No Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>12</td>
</tr>
</tbody>
</table>

\[ X^2 = 25.83 \]
\[ p < 0.01 \]

There are high statistical differences regarding this item.

Only one child from the failure-to-thrive group was in special care compared with seven and three children from the first and second control groups respectively. This indicates that emotional deprivation and lack of bonding or weak bonding is not caused by mother-child separation after birth.
<table>
<thead>
<tr>
<th>No. of case</th>
<th>Index Group</th>
<th>Control Group 1</th>
<th>Control Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>41bs 1oz</td>
<td>71bs 1oz</td>
<td>91bs 11ozs</td>
</tr>
<tr>
<td>2</td>
<td>61bs 15ozs</td>
<td>61bs 11ozs</td>
<td>71bs 3ozs</td>
</tr>
<tr>
<td>3</td>
<td>61bs 6ozs</td>
<td>61bs 2ozs</td>
<td>61bs 4ozs</td>
</tr>
<tr>
<td>4</td>
<td>61bs 2ozs</td>
<td>81bs 2ozs</td>
<td>61bs 11ozs</td>
</tr>
<tr>
<td>5</td>
<td>61bs 13ozs</td>
<td>71bs 7ozs</td>
<td>81bs 4ozs</td>
</tr>
<tr>
<td>6</td>
<td>61bs 4ozs</td>
<td>21bs 12ozs</td>
<td>51bs 15ozs</td>
</tr>
<tr>
<td>7</td>
<td>61bs 14ozs</td>
<td>51bs 9ozs</td>
<td>81bs 14ozs</td>
</tr>
<tr>
<td>8</td>
<td>61bs 12ozs</td>
<td>51bs 14ozs</td>
<td>71bs 0ozs</td>
</tr>
<tr>
<td>9</td>
<td>71bs 15ozs</td>
<td>31bs 0ozs</td>
<td>61bs 15ozs</td>
</tr>
<tr>
<td>10</td>
<td>61bs 5ozs</td>
<td>61bs 13ozs</td>
<td>71bs 3ozs</td>
</tr>
<tr>
<td>11</td>
<td>61bs 6ozs</td>
<td>71bs 4ozs</td>
<td>71bs 0ozs</td>
</tr>
<tr>
<td>12</td>
<td>61bs 8ozs</td>
<td>81bs 4ozs</td>
<td>81bs 2ozs</td>
</tr>
<tr>
<td>13</td>
<td>71bs 5ozs</td>
<td>41bs 4ozs</td>
<td>81bs 0ozs</td>
</tr>
<tr>
<td>14</td>
<td>61bs 2ozs</td>
<td>81bs 2ozs</td>
<td>81bs 0ozs</td>
</tr>
<tr>
<td>15</td>
<td>71bs 3ozs</td>
<td>91bs 2ozs</td>
<td>61bs 12ozs</td>
</tr>
<tr>
<td>16</td>
<td>71bs 12ozs</td>
<td>41bs 7ozs</td>
<td>61bs 8ozs</td>
</tr>
<tr>
<td>17</td>
<td>71bs 6ozs</td>
<td>81bs 0ozs</td>
<td>61bs 8ozs</td>
</tr>
<tr>
<td>Total</td>
<td>1131bs 1ozs</td>
<td>1091bs 2ozs</td>
<td>1271bs 8ozs</td>
</tr>
<tr>
<td>Average</td>
<td>61bs 9ozs</td>
<td>61bs 6ozs</td>
<td>71bs 7ozs</td>
</tr>
</tbody>
</table>
Table 9.104  Child’s temperament.

<table>
<thead>
<tr>
<th></th>
<th>Index Group</th>
<th>Control Group 1</th>
<th>Control Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td>4 (24%)</td>
<td>9 (53%)</td>
<td>15 (88%)</td>
</tr>
<tr>
<td>Difficult</td>
<td>5 (28%)</td>
<td>0 (0%)</td>
<td>1 (6%)</td>
</tr>
<tr>
<td>Slow-to-warm-up</td>
<td>5 (28%)</td>
<td>2 (12%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Intermediate falling into</td>
<td>3 (18%)</td>
<td>6 (35%)</td>
<td>1 (6%)</td>
</tr>
</tbody>
</table>

$X^2 = 22.7 \quad p < .0009$

$\text{Tau } B = -.37 \quad p < .001$

Index group children differ markedly in the distribution of temperamental characteristics compared with the two control groups. Only twenty-four percent of index children were of easy temperament compared with fifty-three percent of the first control group and eighty-eight percent of the second control group. As many as twenty-eight percent were difficult and twenty-eight percent were slow-to-warm-up compared with negligible percentages of these characteristics in both control groups. These figures suggest that more than half of the index group population have presented rearing difficulties from an early stage of life.

There is a highly significant correlation between membership of the groups and temperamental attributes, with the index group manifesting the least favourable characteristics.
Key to Temperament

The definition of diagnostic clusters used for individual scoring is as follows:

H = High   M = Medium;  L = Low.

<table>
<thead>
<tr>
<th>Activ.</th>
<th>Rhythm</th>
<th>App.1</th>
<th>Adpt</th>
<th>Intns</th>
<th>Mood</th>
<th>Persts</th>
<th>Dist.</th>
<th>Thres</th>
</tr>
</thead>
</table>

**DIAGNOSTIC CLUSTERS**

<table>
<thead>
<tr>
<th></th>
<th>Rhythm</th>
<th>App</th>
<th>Adapt.</th>
<th>Mild</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diff.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slow to Warm Up Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Cate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The data on children's development was taken from the medical files. Fifty-five percent of the children were fully assessed at the Paediatric Assessment Centre and the remaining forty-five percent by the Community Medical Officers.

Table 9.105 Motor Development

<table>
<thead>
<tr>
<th>Group</th>
<th>Within Norms</th>
<th>Delayed</th>
<th>Forward</th>
<th>Inapplicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7 (50%)</td>
<td>6 (43%)</td>
<td>1 (7%)</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>10 (77%)</td>
<td>3 (23%)</td>
<td>0 (0%)</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>14 (100%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>3</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 10.1 \quad p = \leq .04 \]

\[ \text{TAU B} = -.45427 \quad p<.001 \]

The motor development differs significantly between the groups. Delayed motor activities were observed in forty-three percent of the index group children, while only in twenty-three percent of the first control and none in the second control groups.
Table 9.106 Language (socialisation)

<table>
<thead>
<tr>
<th>Group</th>
<th>Within Norms</th>
<th>Delayed</th>
<th>Forward</th>
<th>Inapplicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 (33%)</td>
<td>7 (58%)</td>
<td>1 (9%)</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>8 (73%)</td>
<td>3 (27%)</td>
<td>0 (0%)</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>12 (100%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>5</td>
</tr>
</tbody>
</table>

$X^2 = 13.0 \quad p < .0001$

$\text{TAU B} = -.55929 \quad p < .0002$

The language development appears to be delayed substantially in fifty-eight percent of the index group children, while only twenty-seven percent of the first control group and zero percent in the second control group. All the children from the second control group were developing according to 'norms' while only thirty-three percent from the index group.

Table 9.107 Social Development

<table>
<thead>
<tr>
<th>Group</th>
<th>Within Norms</th>
<th>Delayed</th>
<th>Forward</th>
<th>Inapplicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3 (23%)</td>
<td>10 (77%)</td>
<td>0 (0%)</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>6 (50%)</td>
<td>6 (50%)</td>
<td>0 (0%)</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>10 (83%)</td>
<td>2 (17%)</td>
<td>0 (0%)</td>
<td>4</td>
</tr>
</tbody>
</table>

$X^2 = 9.1 \quad p < .01$

$\text{TAU B} = -.46593 \quad p < .001$

There are marked differences in social development amongst the groups. As many as seventy-seven percent of the index group children showed delayed social behaviour in comparison with fifty-percent of the first and seventeen percent of the second control group.
Table 9.108
Number of behaviour problems among index and two control groups children, recorded by the researcher during the assessment period. Recording was based on direct observations.

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Index Group</th>
<th>Control Group 1</th>
<th>Control Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawn</td>
<td>9</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Lethargic</td>
<td>7</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Detached</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Whining</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lack of responsiveness</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Moodiness</td>
<td>6</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Irritability</td>
<td>6</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Inability to join in &amp; relate to others</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Begging for food and drink</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Eating problems</td>
<td>16</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Feeding difficulties</td>
<td>16</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Eating dirt</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vomiting</td>
<td>17</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>15</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Wetting</td>
<td>6</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Soiling</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Fear of toilet</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Temper Tantrums</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Commanding</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Defiance</td>
<td>7</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Screaming</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Demanding</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Behavior</td>
<td>Count</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>Stubborness</td>
<td>15</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Burning</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aggression</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Head Banging</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Low frustration tolerance</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Pestering</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Attention seeking</td>
<td>6</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Refusal to walk</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Refusal to sleep</td>
<td>6</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Excessive sleeping</td>
<td>3</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Excessive eating</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Excessive crying</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>201</td>
<td>63</td>
<td>33</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>5.91</td>
<td>1.85</td>
<td>0.97</td>
</tr>
</tbody>
</table>
Table 9.109 Varieties of feeding difficulties.

<table>
<thead>
<tr>
<th></th>
<th>Index Group</th>
<th>Control Group 1</th>
<th>Control Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor sucking</td>
<td>17</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Excessively long time feeding</td>
<td>11</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Poor retention of liquids</td>
<td>11</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Prolonged refusal to take solids</td>
<td>15</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Poor swallowing</td>
<td>11</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Poor chewing</td>
<td>15</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Vomiting</td>
<td>17</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>15</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Heaving</td>
<td>7</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Complete refusal to take food</td>
<td>8</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>No indication of hunger</td>
<td>12</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Excessive eating</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Begging for food</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Eating and drinking non-food items</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>High hunger drive</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>149</td>
<td>55</td>
<td>19</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>9.93</td>
<td>3.66</td>
<td>1.26</td>
</tr>
</tbody>
</table>
There is a substantial difference between the groups on the number of feeding difficulties manifested by the children. The greatest proportion of feeding problems being exhibited by the index group children fifteen eating/feeding difficulties (as listed) would be manifested by ten index children, while only by four and one from the first and second control groups respectively. These findings strongly indicate that the non-organic failure-to-thrive children present numerous and serious eating problems.

Table 9.110 Types of maternal feeding style

<table>
<thead>
<tr>
<th></th>
<th>Index Group</th>
<th>Control Group 1</th>
<th>Control Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forceful, impatient angry mother</td>
<td>5 (29%)</td>
<td>1 (6%)</td>
<td>1 (6%)</td>
</tr>
<tr>
<td>Unconcerned, neglectful mother</td>
<td>5 (29%)</td>
<td>2 (12%)</td>
<td>1 (6%)</td>
</tr>
<tr>
<td>Not persistent, passive mother</td>
<td>5 (29%)</td>
<td>5 (29%)</td>
<td>4 (24%)</td>
</tr>
<tr>
<td>Determined, helpful, coaxing mother</td>
<td>2 (13%)</td>
<td>9 (53%)</td>
<td>11 (64%)</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 14.1 \quad p < .03 \]

TAU B = .42584 \quad p < .0003

The first and second control group group mothers differ significantly from the index group in the way they feed their children. The mothers of the failure-to-thrive children appear to have negative, angry, neglectful or passive feeding styles in as many as eighty-seven percent of the cases, this compared with forty-seven percent among the first control group mothers and thirty-six percent among the second control group mothers. Only thirteen percent of the mothers of failure-to-thrive children have encouraging and coaxing feeding styles compared with fifty-three percent from the first control group and sixty-four percent from the second control group.
Chapter 10

The Intervention

Treatment Results

An analysis of the behavioural interventions with seventeen index cases reveals that the following pattern (detailed individual analysis follow later):

1. An overall total of twelve specific treatment goals ('targets') were assessed and negotiated with clients (Mean No. 7, Range 3-12)

2. The primary treatment goal achieving improved/viable feeding eating was tackled in 17 (100%) of the cases).

Other targets proved to be: Mother child interactions (71% of cases).

Mother child relationships (60% of cases)

Behaviour problems (e.g. tantrums, non-compliance) (70% of cases)

Sleeping (23% of cases)

Sibling-client interactions (29% of cases)

Self control/stress management (23% of cases)

Coping strategies (e.g. child and home management) (23% of cases)

3. Measure of change were rated from +2 to -2 (see Chapter 8A)
(a) The results with all target problems (N=124) are as follows:

Table 10.1.  
<table>
<thead>
<tr>
<th></th>
<th>+2</th>
<th>+1</th>
<th>0</th>
<th>-1</th>
<th>-2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>69</td>
<td>41</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(56%)</td>
<td>(33%)</td>
<td>(4%)</td>
<td>(4%)</td>
<td>(3%)</td>
</tr>
</tbody>
</table>

Analysing the ratings into 'Satisfactory/Improvement' (+2) Moderate Improvement (+1): and collapsing the 0, -1 & -2 ratings into 'No Improvement' we got the following results.

Table 10.2. Treatment Effectiveness

<table>
<thead>
<tr>
<th>Satisfactory Improvement</th>
<th>Moderate Improvement</th>
<th>No Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
<td>41</td>
<td>14</td>
</tr>
<tr>
<td>(56%)</td>
<td>(33%)</td>
<td>(11%)</td>
</tr>
</tbody>
</table>
(b) The results for feeding/eating problems are as follows:

<table>
<thead>
<tr>
<th></th>
<th>+2</th>
<th>+1</th>
<th>0</th>
<th>-1</th>
<th>-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>11</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(%)</td>
<td>(64%)</td>
<td>(29%)</td>
<td>(7%)</td>
<td>(0%)</td>
<td>(0%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Satisfactory Improvement</th>
<th>Moderate Improvement</th>
<th>No Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>(64%)</td>
<td>(29%)</td>
<td>(7%)</td>
</tr>
</tbody>
</table>

Table 10.4.

(4) Mother-child interactions

<table>
<thead>
<tr>
<th>Satisfactory Improvement</th>
<th>Moderate Improvement</th>
<th>No Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>(50%)</td>
<td>(33%)</td>
<td>(17%)</td>
</tr>
</tbody>
</table>

Table 10.5

(d) Mother-child affection

<table>
<thead>
<tr>
<th>Satisfactory Improvement</th>
<th>Moderate Improvement</th>
<th>No Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>(60%)</td>
<td>(20%)</td>
<td>(20%)</td>
</tr>
</tbody>
</table>

Table 10.6

(e) Behaviour problems (e.g. tantrums, demanding, non-compliance withdrawal, etc)

<table>
<thead>
<tr>
<th>Satisfactory Improvement</th>
<th>Moderate Improvement</th>
<th>No Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>(44%)</td>
<td>(44%)</td>
<td>(12%)</td>
</tr>
</tbody>
</table>
Table 10.7.
(f) Sleeping

<table>
<thead>
<tr>
<th>Satisfactory Improvement</th>
<th>Moderate Improvement</th>
<th>No Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>(50%)</td>
<td>(50%)</td>
<td>(0%)</td>
</tr>
</tbody>
</table>

Table 10.8
(g) Sibling client relationships:

<table>
<thead>
<tr>
<th>Satisfactory Improvement</th>
<th>Moderate Improvement</th>
<th>No Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(40%)</td>
<td>(20%)</td>
<td>(40%)</td>
</tr>
</tbody>
</table>

Table 10.9.
(h) Self-control (stress-management)

<table>
<thead>
<tr>
<th>Satisfactory Improvement</th>
<th>Moderate Improvement</th>
<th>No Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>(50%)</td>
<td>(50%)</td>
<td>(0%)</td>
</tr>
</tbody>
</table>

Table 10.10
(i) Coping strategies:
   (child home management)

<table>
<thead>
<tr>
<th>Satisfactory Improvement</th>
<th>Moderate Improvement</th>
<th>No Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(75%)</td>
<td>(0%)</td>
<td>(25%)</td>
</tr>
</tbody>
</table>
A perennial problem in evaluating these essentially encouraging results is encapsulated in the question: Would these children or mother-child relationships have improved without treatment?. Two partial (i.e. not fully satisfactory) answers are that (i) there was no indication of improvement during baseline measures; indeed some problems were deteriorating; and (ii) many of the problems, notably the central ones of feeding were of long duration - sometimes beginning at birth.

Another issue which effects all human measurement concerns the reliability and validity of the evaluation of success and failure. It is only too easy to see what one wants to see, especially where the alleviation of children's suffering is involved. Then too, clients are sometimes only willing to 'reward' the efforts and concern of the therapist with a 'bonus' of being better than they really are- the so called 'hello-goodbye' effect.
Another area of contention is that which concerns scorer reliability. When rating parent's estimates of changes during debriefing. Once a mother had replied to a question, her answer was rated by the interviewer on a scale ranging from -2 to +2. Although a response could occasionally be scored quite unambiguously (e.g. only a rating of +2 would be correct if, for instance, a mother said her child had been 'excellent' when therapy had ended), it is likely that a degree of subjectivity will have entered into the majority of the judgements which were made. In those cases where the mothers were not particularly specific it was frequently difficult to assess the degree to which the situation might have improved or deteriorated.

In the interests of objectivity there are certain measures one can adopt, such a meticulous follow-up of cases (no readmission to hospital would be 'hard' evidence of cure in life-threatening feeding disorders) and an independently judged evaluation of the therapeutic endeavour. These measures have been adopted and appear in the following.

There is however, a degree of independent evaluation built into the study. Paediatrics and nutrition consultants are deciding at regular clinics, whether a child is too vulnerable in terms of his/her health to remain at home or whether the youngster should be admitted (or re-admitted) to hospital. The criteria are necessarily 'hard ones' and err on the side of caution because the child's life may be at risk. It is of significance therefore that no child had to be admitted (or re-admitted) to hospital following the social worker's initiation of home-based treatment (see Table 10.11)
Table 10.11. Admissions to hospital prior to researchers intervention in number and days spent in hospital

Number of admissions during treatment and after termination of the treatment.

<table>
<thead>
<tr>
<th>No of Cases</th>
<th>Age in months</th>
<th>State of admissions at point of treatment</th>
<th>No of admissions during treatment</th>
<th>No. of admissions after termination of Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>Days</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>44</td>
<td>2</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>29</td>
<td>3</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>39</td>
<td>2</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>17</td>
<td>4</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>1</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>2</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>24</td>
<td>1</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>42</td>
<td>1</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>3</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>2</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>24</td>
<td>4</td>
<td>230</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>72</td>
<td>1</td>
<td>7</td>
<td>0</td>
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<tr>
<td>13</td>
<td>10</td>
<td>4</td>
<td>37</td>
<td>0</td>
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<tr>
<td>14</td>
<td>21</td>
<td>1</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>60</td>
<td>1</td>
<td>6</td>
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<tr>
<td>16</td>
<td>45</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>21</td>
<td>2</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>35</td>
<td>541</td>
<td>0</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>27.47</td>
<td>20.59</td>
<td>32.42</td>
</tr>
</tbody>
</table>
Footnote (behavioural casework treatment)

(1 = 1st Admission
(2 = 1 previous admission
(3 = 2 previous admissions etc.

+ treatment visits - each session lasts between 2-3 hours.

It is clear that after initiating behavioural casework (a fortuitous correlation or causal link?) the child ceases to be re-admitted to hospital. The one exception is a special case and is described later in the Chapter.

The 'costs' (in contact time) if the intervention are detailed below and are discussed at the end of the thesis.

Table 10.12.
The duration of follow up since the child was discharged from the hospital, number of home visits by a researcher, during treatment and number of out-patients visits.
<table>
<thead>
<tr>
<th>No of Cases</th>
<th>Duration of Social work Intervention in months</th>
<th>No of home visits by researcher</th>
<th>No. of Out-patients visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>36</td>
<td>27</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>20</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>17</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>11</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>14</td>
<td>6 treatment in hospital</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>10</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>5</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>14</td>
<td>13</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>10</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>13</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>224</strong></td>
<td><strong>183</strong></td>
<td><strong>74</strong></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>13.8</strong></td>
<td><strong>10.76</strong></td>
<td><strong>6.17</strong></td>
</tr>
</tbody>
</table>
Probably the most dramatic evidence for beneficial change following behavioural casework (and it should be remembered that following the medical assessment and handing-over to the social worker, no medical treatment, per se, was prescribed) so provided in Figures 10.1 and 10.2 indicating marked shifts in the percentile status of the child for height and weight from admission to case-termination.

No child remains under the third percentile; for some the shift is massive.
Individual Case Evaluations

The detailed results of Behavioural Casework Interventions (Cases 1 - 17) are provided below.

EVALUATION OF THE TREATMENT PROGRAMMES (17 CASES)

CASE 1

There were seven goals in the treatment:

1. To increase positive mother-child interaction
2. To desensitise Dean's anxieties with regard to his mother.
3. To desensitise mother's negative feelings towards child.
4. To increase family interaction, like parents and children playing together.
5. To decrease Dean's problem behaviours like; temper tantrums, demanding and moodiness.
6. To introduce toilet training.
7. To allow the mother a time during the treatment to bring and discuss her own problems and difficulties and to provide her with extensive support in her own right.

Treatment programme as such, did not start until two months after assessment was completed because of various difficulties connected with Mrs B's health, indoor work and probable reluctance to commit herself to quite a demanding task. As Dean was on the 'At Risk' register, I visited weekly to do some counselling with Mrs B regarding child-care and her own low feelings.
The programme was designed to deal with one target at the time, because I felt Mrs B would not cope with the full programme at once.

To increase mother-child interaction (of the positive kind)

1. The everyday activities such as playing, reading, involving Dean in housework, were carried out in a very inconsistent way. The mother’s excuses for not persevering with the programme were: lack of time, feeling ill and depressed.

During the five month period, mother-child interaction improved a little in quality and quantity. Although in an unsystematic way, she made some effort to talk, play, touch, hug and look at Dean, despite Dean’s irresponsiveness at times.

She found this extremely hard to do, but for the first time she stated that she had become aware that Dean could say something quite amusing and witty and she had also noticed that he had a pleasant smile. There was a sign that the relationship was improving. Dean would also occasionally come to the mother. Improvement rated as +1 at the time.

2. The whole family playing together happened only five times, as the father was seldom at home and mother felt that she had had enough after playing with Dean.

No Improvement: 0

The formal programme stopped altogether at a crisis point when the mother discovered that she was pregnant and requested an abortion.
After the abortion Mrs B. became very depressed. There were serious marital frictions and financial difficulties. There were pressures from the family, the husband and the G.P. The G.P. felt she should have psychiatric treatment but she would not accept it. Paediatricians and the community doctors felt that a child psychiatrist might be of some help to the mother and child. Mrs B. did not attend any of the three appointments made.

The situation was getting out of hand. Dean became a target for blame. His behaviour deteriorated.

a. Wetting during the night.

b. Wetting during the day after school.

c. Stopped talking to his mother — unless he wanted something.

His incontinence problem began to have serious implications and showed a disturbed emotional pattern. He would wet the bed while awake, urinate into the corners of his bedroom, rip his bedding.

Mother-child relationship became worse. She ignored him completely or when she could not stand him any longer would send him upstairs just to get rid of him.

Siblings — Dean’s relationship and particularly with his two year old younger brother became worrying. Wayne would hit Dean and on two occasions left him with a black eye. Dean would not stand up for himself because he was frightened of the mother, partly because he could not stand up for himself in different situations with different children and in other places.

A Case Conference was called and it was decided that Dean should
go to the short-term Children's Home on a flexible basis to bring relief to the mother and also in order to do some work with the whole family by the residential staff.

These arrangements broke down after three months as parents found it unproductive, they would not keep the appointments, and they found the therapy threatening. The mother found it too difficult to go along with the behavioural treatment as well. The attempts to help her resolve her emotional conflict and strong feelings of rejection failed. She would not accept help from anybody.

Bruises were noticed on Dean by the School Nurse. At this stage a Care Order was obtained and Dean was fostered out. What is of some importance to note is, that although I removed Dean from the family, resulting in very unpleasant court proceedings, my relationship with both parents remained good. Six counselling sessions, two per week, were provided to deal with acute guilt feelings, anger and depression after Dean was removed from home.

Rating:
Eating (over-eating) (0)

Behaviour - demanding -1
              temper tantrums -1
              Moodiness -1
Relationship with mother -2
Relationship with father (0)
Interaction with mother -2
Interaction with siblings-1
Development Motor +2
Language +2
Social +2
Toileting -1

Follow up:

Six months follow up in the foster home indicated some behaviour problems like enuresis, pre-occupation with food and attention seeking. The foster mother found him at times a tiring and difficult boy.

One year follow up.

Dean's behaviour still presents some problems. The foster mother continued to find him difficult to cope with. More and more frequently she was thinking of giving him up.

CASE 2

The goals of the treatment programme consisted of:

1. To deal with an acute eating problem and poor weight.
2. Increasing good behaviour (mother-child interaction)
3. Reducing bad behaviour; demanding; temper tantrums, commanding and sleeping problems.
4. Teaching the mother self-control skills.

Eating.

The eating programme was started by three sessions of modelling,
to allow parents to observe the range of management skills prior to and during mealtimes. Secondly, to implement correctly the treatment programme. Lisa responded well to a Disneyland character sticker chart, praise and prompting. As long as the mother stayed calm and patient she ate well. She had always eaten better when only the father was present at the table. The mother's inconsistency in management, but mainly her unpredictable moods and inability to control her irritability, produced some difficulties. After three months of treatment, Lisa's eating became more satisfactory and she began to eat a wider variety of food. Heaving almost stopped and the ability to chew pieces of meat and bread etc. improved slightly. Lisa began to gain weight steadily.

The sticker chart was gradually faded out. Although the formal eating treatment was terminated after five months, I had to supervise this case for the next year because of Lisa's tendency to relapse and a rather unsatisfactory relationship with her mother.

At the age of four years and two months, Lisa was discharged from the paediatric outpatients clinic reaching nearly 25th percentile. Improvement in eating rated as +2 and Growth as +2.

2. Dealing with conduct problems.

Increasing good behaviour.

The main target here was to increase positive interaction between mother and Lisa. Lisa had little encouragement to behave well. Mother's interaction consisted of commands and pressures.
The mother was screaming at Lisa when she could not do something or was unwilling to comply immediately. The mother’s reactions to Lisa were setting up inappropriate responses from her, ending up in battles of wills and consequently in smacking and tears. The mother found it difficult to control her temper and to be calm. Self-control skills were taught and interaction between them became more constructive and peaceful. The ‘Farmyard’ Chart was introduced to encourage Lisa to respond to her mother’s realistic requests, further reinforced by sweets and praise. There were good and bad days even at the end of the treatment, but nothing like its previous intensity and frequency. Inconsistency and the mother’s inability to control her temper were the main problems. Improvement rated as +1.

Reducing Lisa’s poor behaviour

a). Demanding
b). Temper Tantrums
c). Commanding
d). Sleeping

Extinction and Time Out and Response Cost were used to deal with demanding, temper tantrums, commanding and sleeping. It took only ten days to resolve her sleeping problems (refusal to go to bed and stay in bed). Mild temper tantrums and demanding were ignored with some success but mostly ‘Time Out’ was used, because of the mother’s poor self-control skills. Using ‘Time Out’ reduced aversive interaction such as the mother’s screaming at Lisa. ‘Time Out’ was also used as a safety measure for the child (preventing Lisa from being hit). Demanding, commanding and temper tantrums dropped considerably during the treatment, so did improve the mother’s reaction to Lisa. I had some doubts whether the mother-child interaction would be maintained without
Improvement rated as +1.

Reducing pressures in Lisa:

Unrealistic expectations which were setting up many frustrating problems and acute confrontations, were most difficult to eliminate. The mother felt at times, that Lisa was doing it on purpose to annoy her or to get her own way. However, she stopped somewhat pressurising Lisa and showed more patience when playing, reading or introducing new activities. Improvement rated as +1.

4. Programme for mother:

Self-control exercises:
The mother realised that many problems were triggered off by her inability to control irritability and anger. By applying self-control techniques, the number and intensity of incidents of screaming, hitting and confrontations with Lisa as well as with the father dropped somewhat, but not when the mother was under considerable stress. Therefore, relaxation exercises were introduced to help her relax and control tension. The mother reported great relief after each session, but felt she could not do it each time she needed it, because of the time factor. Improvement was rated as +1.
Rating
1. Eating +1
2. Demanding +1
3. Temper tantrums +1
4. Commanding +2
5. Sleeping +2
6. Self-control for mother +1
7. Reducing pressures on Lisa +1
8. Mother-child interaction +1
9. Mother-child relationship +1
10. Growth and weight +2

Follow up:
Six month follow up. Lisa-mother interaction remained reasonably stable. Lisa's behaviour was manageable though the mother occasionally had to use 'Time Out' either for Lisa or herself.

One year follow up. Lisa had started school and the mother was very anxious about her eating there. There were a few stresses at home. The mother was awaiting a full hysterectomy operation and the father had lost his job. Mother-child interactions had worsened and Lisa's temper tantrums became more frequent again. The mother appeared to be irritable and unable to control her temper, when dealing with Lisa or the other members of the family. A booster programme was unlikely to be carried out persistently since the mother was quite ill. Supervision and support is going to be provided to help them through a difficult period.
Case 3.

There were five treatment goals:-

1. Eating
2. Increasing good behaviour
3. Reducing bad behaviour, demanding, temper tantrums, disobedience, burning.
4. Improving mother-child and sibling child interaction.
5. Sleeping problems.

1. Eating

Because of the severity of the eating problems, the treatment was modelled and supervised during the early stages. The mother was unable to carry it on in the early stages of treatment persistently and at times could not cope with it emotionally. For these reasons, progress was slow and at times difficult to continue. However, after six weeks, Jennifer began to eat a little more and her behaviour during mealtimes improved.

The three months follow-up in the outpatients clinic showed good weight gain and the approval by the paediatricians, gave the mother a boost and a well deserved reward.

Jennifer took an interest in the 'star chart' and tried hard to earn herself a story 'after dinner' as a reward. Improvement rated after six months of treatment as +2.

2. Increasing good behaviour

(positive reinforcement)
The aim of this programme was to redirect mother's attention to Jennifer's pro-social behaviour and to increase mother child interaction of a positive kind. Mother made an effort to encourage Jennifer to play and to participate in various activities. In order to encourage Jennifer to behave appropriately a symbolic reward was used in the form of a 'Farmyard Chart'. She did not like the chart and it was replaced by a 'Balloon Chart'. The process of change was rather slow, time consuming and tiring for everyone concerned. Jennifer however, gradually became calmer and her behaviour more organised. As a result she became happier and started to laugh (laughter had not been observed before).

3. Reducing poor behaviour

Demanding, temper tantrums, disobedience and burning temper tantrums and demanding, were dealt with by ignoring her or in more acute situations by using 'Time Out'. The mother found both techniques difficult to use, as she felt sorry for the child. I spent a whole day with the mother literally taking over the care and management of Jennifer, to demonstrate how to handle each situation. The father found the method helpful and useful. Due to the inconsistency and lack of persistence, Jennifer's behaviour with the mother improved only somewhat, but with the father, markedly. Improvement rated as +1.

Temper tantrums decreased in frequency and intensity and the mother felt that she could cope with the occasional
ones. Improvement rated as +1.
Demanding improved to +1 level.
Burning stopped altogether to +2 level after precautions were taken (like using a fireguard, removing matches) and when the atmosphere at home became calmer and Jennifer's various positive activities increased.

4. Mother-child interaction:

Since the programme started the mother-child interaction improved, Jennifer would come to the mother for comfort and help, something never observed before and more frequently showing enjoyment in being with the mother. Since there were fewer confrontations, eating, and Jennifer's appearance improved. The mother became less anxious and panicky when dealing with her. Their verbal communication became softer and less aggressive. Improvement rated after six months as +1.

Jennifer siblings interaction - did not improve. The boys were still avoiding Jennifer as her play with them was disruptive and anger-provoking. The boys were often told off by their mother, and often when Jennifer was at fault. (no change). 0

5. Sleeping

Sleeping was resolved within two weeks time. It is difficult to assess whether it was due to the treatment programme or the fact that the father dealt with Jennifer
during the evenings, including putting her to bed as the mother took an evening job from 6pm to 10pm. The father has always been able to manage Jennifer better than the mother in putting her to bed and also in other areas. While both parents were at home during the treatment time and prior to the treatment, Jennifer's refusal to go to bed was causing friction between the parents. The mother felt sorry for Jennifer and would argue with the father, accusing him of being cruel. The father stated that he strictly adhered to the programme and found little resistance from Jennifer. Improvement rated +2.

Rating:
1. Eating +2
2. Demanding +1
3. Temper Tantrums +1
4. Defiance +1
5. Burning +2
6. Sleeping +2
7. Mother-child interaction +1
8. Mother-child relationship +2
9. Sibling-child interaction 0
10. Growth and weight +2

Follow-up

Six months follow up indicated stability in the achieved
improvement. Jennifer still tended to throw a temper tantrum if she could not get her own way or become very moody when she was corrected, but the mother seemed to be more able to ignore her or to jolly her out of a bad mood. Their interaction remained positive and meaningful on the whole, but the mother reported some bad days, when she could not do anything to satisfy Jennifer. Sleeping problems continued to occur occasionally when the mother was not at work.

One year follow up:

The one year follow up showed deterioration in: a) sleeping, b) eating; c) temper tantrums and d) mother-child relationship.

The mother was made redundant three months ago and became quite depressed. She seldom went anywhere or did any housework. Since she stopped working, Jennifer’s routine in sleeping worsened. She went to sleep when she wanted when the father was not at home. Occasionally she ate dirt, drank from the dog’s dish or she hid the food. The mother-child interaction had lessened and when it occurred, it usually took a negative form. Jennifer became more and more irritable and aggressive. The mother has now been referred to the psychiatrist for some help because she had developed agoraphobia.

CASE 4

The goals of the treatment of Russells case were as follows:
1. Eating.
2. Withdrawal and irritability.
4. Mother-child interaction.
5. Mother-child relationship.
7. Mother's depression.
8. Anxiety and tension.

Eating:

At the point of referral Russell would not take feeds from the mother at all. Because of the seriousness and severity of the feeding problem and his extremely low weight, the researcher spent two weeks modelling, helping and supporting the mother during mid-day feeding. The father and the next-door neighbour (a friend) and frequently the health visitor, were helping with the morning and evening feeds. The aim was to create a calmer atmosphere and to reduce tension prior to, and during feeding, so that Russell and his mother could become less anxious whilst feeding took place. The mother was helped to reduce tension by relaxation exercises and generally calmed down due to massive support and structured help which was provided. She found it extremely difficult to handle Russell with warmth, care and affection but started talking to him as advised and behaved towards him in a more gentle way. Gradually, after three weeks, he began to take feeds from her and also in her presence when someone else was feeding him. There were better days and worse days, breakfast being the most difficult. He was irritable, and would not
chew or swallow, but when he was allowed time, he would eat a little and he drank a lot of milk. He was gaining only about three ounces a week. He stopped crying when his mother was approaching him to feed him and was more co-operative when being fed. Vomiting occurred only occasionally and diarrhoea decreased. The mother felt more confident to feed him and stopped going into his room at night to see whether he was still alive. Daily telephone calls were made to prompt mother and to give her support and advice. The health visitor and the next door neighbour were available to help daily. After three months Russell gained two pounds. He was closely followed up and observed in the out-patients clinic. Improvement in eating was rated as +1 at that stage. The treatment took twelve weeks with quite good results.

STAGE 2

The treatment took twelve weeks, with quite good results. The mother was encouraging Russell and his responsiveness to the mother was recorded using a five point scale.

0- Very poor - no interest, no response, withdrawal, quiet not smiling, not approaching mother when encouraged.

1- Poor - very little and brief interest shown in toys. Little response when being played with. Would make an attempt to come to mother in better mood.
2- Reasonable - Interest in play shown but only when asked to do something. Come to mother when asked. Responds to her handling with some pleasure, smiles occasionally.

3- Good - Begins to like being with mother, talks to her asks her to help, comes to her without hesitation, smiles and enjoys himself.

4 - Very good - Appears to be very alert, plays freely, cuddles up to mother, moves a lot, laughs and talks.

The first few sessions were modelled by the researcher. The researcher's follow up observations proved the validity of the recorded changes when for the first time we saw Russell behaving freely, happily, and being at ease in the presence of his mother. Improvement was marked as +1.
STAGE 3

The mother’s reactions to Russell were positive, peaceful, and showed more affection. There were no eating problems any longer. She stated however, that there were days when he was awkward and unsure of himself. The next stage of an intensified mother/child interaction was devised (overlearning) lasting two weeks. The aim was to generalise his growing relaxed ways of interaction with the mother at anytime and in any situation, (see intensified treatment programme).

STAGE 4

The mother found it extremely trying to have Russell every minute of the day for two weeks and also to control her moods at the same time. She had to be calm, loving, talkative, and patient. The mother would ring up if she was in difficulties and the researcher would see her every other day to provide encouragement and help. Frequent telephone calls were made to keep the mother 'going'. The outcome was successful. Russell became 'one of the boys' as both parents stated.

Improvement was rated as +2.

Rating:

1. Eating          +2
2. Withdrawal and irritability.  +1
3. Development:
Motor +1
Language +1
Social +1
4. Mother-child interaction. +1
5. relationship. +1
6. Sibling-Russell interaction 0
7. Mother's depression. +2
8. Anxiety and tension +1
9. Growth and weight +1

Follow up:

Russell's case, because of its complexity was evaluated in four stages. Various interactions and structured treatment took nearly two years. The case has been finally closed for over a year now. The family and Russell are seen from time to time because the child is still on the 'At Risks' register.

Russell reacted acutely to the stresses of the family became withdrawn, did not participate in any activities at home. The mother became very anxious and panicked thinking that he might go back to square one. The father was getting angry and the two brothers remained indifferent.

On the whole both Russell and the mother had done very well. The mother went from one extreme of rejection to the other of overprotection and that at times created problems between the parents.
Russell was still below the expected 'norm' for his age in weight and growth, but was progressing steadily and has been discharged from the follow up out-patients clinic. At school he has adjusted reasonably well although it took him much longer than his twin brother to do so. It was interesting to observe that Russell and Neil had a great deal of positive interaction at school, but still not at home. Simon only played with him when he was asked to do so. There had been no improvement in Russell’s sibling interactions at home, Russell’s moods depend on his mother’s moods, he responds to and picks up atmospheres at home like a 'barometer'. In the end, difficult patches occurred very seldom and when they did they were quickly resolved.

CASE 5

No formal programme was devised in the foster home deliberately. I wanted to see how the foster mother was going to cope with feeding, interaction, and how she perceived the child.

1. Two week feeding base-line showed feeding difficulties, especially sucking, and a long time taken for feeding. Spoon-feeding showed marked improvement in week 3-4 and became reasonable in week 5-6 when solids were introduced.

2. Withdrawal, listlessness and irresponsiveness gradually became less acute after about 15-20 days. As the positive
interaction intensified, she began to be more alert and active. She reacted on a 'normal' level to social interaction after eight weeks in the foster home.

3. The foster mother found Ann-Marie difficult to feed and amuse, but she felt it was the result of early deprivation. Temperamental testing while at the foster home put her into the category of 'difficult children'. Later description of the child was stubbornness, easily upset by any change of routine or surroundings. The foster mother however managed her well.

SCORING AFTER CHILD'S 3 MONTHS IN THE FOSTER HOME

1. Feeding +1
2. Crying +2
3. Vomiting +2
4. Diarrhoea +2
5. Interaction with foster mother +2
6. Relationship with foster mother +2
7. Withdrawal/irresponsiveness +1
8. Growth +2
9. Development +2

Behaviour no. 2 (crying) occurred only at home and was reported to be severe.

During the hospitalisation period, the baby became withdrawn and irresponsive.
Follow-up:

6 months follow up showed improvement in eating from +1 to +2 and very good adjustment to the foster home.

1 year follow up was done by the Area social worker, who reported that improvements in all the aspects of behaviour were being maintained.

CASE 6

Simon’s feeding improved very quickly once his mother was more confident as how to handle him. He gradually became calmer, slept for longer periods of time and began to respond to the mother in a positive way. Modelling, developmental counselling and support giving was particularly useful in this case. Simon was discharged from the Paediatric Outpatients Clinic at eight months.

Rating:

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<td>Mother/child interaction</td>
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Follow up:
Six months and one year follow-up did not reveal any problems.
Progress was maintained at all levels.

CASE 7

There were four main goals in this case.
1. Dealing with deficit behaviour
2. Improving mother-child interaction and relationship.
3. Improving child's regular care.
4. To give the mother support and to teach her coping strategies.

1. Linda attended nursery regularly. The mother made an effort to stay with her. The first few days presented some difficulties with settling down and encouraging her to play with other children. At the end of the first month she became far more alert, vivacious and sociable. Initial frustrations because of the inability to communicate had lessened gradually as she learnt new words. After six months Linda started building up short sentences, played well with other children and seldom shown any signs of withdrawal.
She was also toilet trained.

Improvement rated by the nursery staff was +2.

2. Improving mother-child interaction and relationship.

Trial playing sessions were modelled by the researcher and subsequently followed up by the 'Home Start'. It was felt, after six weeks, that the mother was doing well on her own. The mother extended play time to an hour and began to take the children to play in the park. Although father initially did not agree to participate, he began to join in the children's and the mother's activities. Linda's behaviour improved markedly. She became lively and alert. The relationship with the father improved as he found her more enjoyable and rewarding. Apart from the set sessions, the mother's interaction with Linda expanded to an acceptable level. Improvement rated after six months of intervention as +2.

3. Improving child's regular care

The first few weeks were closely supervised and a lot of advice and encouragement was given by the 'Home Start' volunteer. Tasks like planning the menu within her limited finances, were to shop, when and how to teach children new skills. The mother found 'Home Start' support and encouragement invaluable.
Toilet training was dealt with by rewarding Linda for sitting on the potty with smarties and praise. She was toilet trained within seven weeks.

Eating was structured, improved in quality and supervised by the mother. Linda was putting on weight systematically. 'Home Start' involvement was terminated after four months. Improvement was rated as +2.

4. Teaching mother coping strategies.

Developmental counselling, advice regarding child-care and needs and counselling regarding her own needs and family functioning were provided. The mother felt that she had learnt a lot. Improvement +2

Linda was attending the out-patients clinic to watch her progress in growth and development. After four months the case was closed as she reached the normal level in weight and the paediatrician was satisfied with her development and well being at home. Improvement +2

Rating:

1. Eating +2
2. Deficit behaviour
   - Withdrawal +2
   - Development +2
3. Mother-child interaction +2
4. Mother/child relationship+2
5. Child's regular care +2
6. Teaching mother coping strategies +2
7. Growth and weight. +2

Follow up:
Six months and then one year follow up indicated that the progress achieved during the treatment was being maintained. Since the child was on the 'At Risk' register the case was then transferred to the Area Social Services.

CASE 8

There were six treatment goals.

1. Structuring and improving regular child care.
2. Providing stimulation.
3. Improving mother-child interaction.
4. Teaching social skills.
5. Teaching mother/child to play.

1. Structuring and improving regular child-care:
The mother was asked to observe mealtimes and to provide a more balanced diet for Jason. She was helped with this task by the 'Home Start' volunteer for the first three weeks. She took pride in her children's appearance and in their cleanliness. The nursery staff reported a marked change in Jason. He did not smell of urine, was bathed and had clean clothes on. The improvement is marked as +2.

2. Providing stimulation:
For the first few days in the nursery, Jason's behaviour was erratic and frantic. He could not concentrate on anything for more than two or three minutes. He appeared to be over-excited and over-awed. During the second week
he began to pay attention to what was said and he began to follow instructions. At the end of the month he settled down well, picked up several new words and learned to play with a few toys. He still did not relate to a group of children. Gradually, his language improved, he began to communicate with children, play with them and share the toys. The mother spent each day with him for at least two hours, sometimes all morning playing with the children and helping the staff. She had learnt many management and playing skills and totally enjoyed it. The Nursery Staff found her helpful and highly motivated. Jason began to build up sentences containing four or five words after being at the nursery for four months. His behaviour was not causing any specific problems. He became more vivacious. The improvement noted by the Nursery Staff in language development, behaviour and playing skills was +2.

3. Improving mother/child interaction:

A time was set half an hour after dinner each day to play with Jason. Toys were provided by a 'Mother's Group' that the researcher was running at the time. The first two sessions were modelled by the researcher, third and fourth, supervised by the 'Home Start' volunteer. Apart from a set time of playing, the mother increased interaction with Jason during the day. Jason's withdrawal ceased after about five weeks. He began to laugh, play with his sister and occupy himself constructively for longer periods of time. Improvement rated as +2.

4. Teaching social skills:

a) Toilet Training: a star chart was started and regular toileting and rewards for both using the pot and being
clean and dry. The first two weeks did not decrease the number of soiling and wetting which was, as it was discovered, mainly due to the mother's lack of consistency to sit him on the potty so a time table was written when to use the potty. After about four weeks, no single accident of soiling or wetting was recorded. The mother was impressed by the results brought about by the regular time table and the use of rewards. After a time he would bring the potty himself if he wanted to go. The star chart rewards and regularity of toileting proved to be highly effective - success rated as +2.

b) Eating skills: Teaching Jason to eat by himself took a long time. After four months there was only some improvement rated as +1.

c) Dressing and undressing.

Difficulties were experienced in the morning, during the nursery days, when he was hurried. The mother was advised to get him up earlier to allow him more time for dressing. A star chart was used as a reinforcer. Rating +2.

5. Teaching mother/child to play:

Originally the 'Home Start' was used to teach the mother to play and interact with the children. Since the mother had been learning these skills already at the nursery, the 'Home Start's' role has changed to support and giving help with planning menu's, advising on regular child-care etc. After two months this help was terminated as the mother was coping well. Improvement rated as +2.

6. Sleeping

Sleeping problems were resolved during the baseline period so no formal programme was necessary, apart from occasional
advice. Improvement rated as +2.

Remarks:

The father, during the assessment period refused to participate in the treatment programme. However, when Jason became more responsive and talkative he began to talk and occasionally play with him. The mother found him more helpful and supportive.

Rating scale after four months of treatment:

1. Structuring and improving child care (eating) +2
2. Providing stimulation - language development +2
3. Improving mother/child interaction - reducing withdrawal +2
4. Teaching social skills - toileting +2
   eating skills +1
   dressing and undressing +2
5. Teaching mother and child to play +2
6. Sleeping +2
7. Growth and weight +2

Follow up:

Six months and one year follow up indicated that the progress achieved during the treatment was maintained. Since the child was on the 'At Risk' register the case was transferred to the Area Social Services with the recommendation for the child to be 'Struck Off' from the register.
There were four treatment goals:

1. Structuring and improving child-care.
2. Increasing stimulation by improving mother/child interaction.
3. Feeding.
4. Improving weight and development.

1. Structuring and improving child-care:

There was very little improvement throughout six months involvement with the family. There was always some reasons why Sabrina was not bathed, changed or the house not cleaned. Some efforts were made when my visits were arranged, but during the unexpected visits, the house was in chaos and Sabrina dirty and wet. The mother spent most of the time having coffee with neighbours or watching T.V. It did not bother her and she did not feel it was important to look after the house and hygiene properly. Improvement rated as 0.

2. Increasing stimulation and improving mother/child interaction:

There appeared to be some improvement in interaction and stimulation. Sabrina became more alert and began to grow a little, she also took some interest in toys. The mother cuddled her and talked to her, whilst I was there. The father's interaction with Sabrina was always more meaningful, but limited since he was at work. I was worried about her retarded development, poor socialisation and care, so arrangements were made to place Sabrina and her sister, aged four, (who showed emotional
disturbance) in the day nursery for deprived children for two days a week. Sabrina made slow but reassuring progress whilst there, especially in motor and language development. She became more alert, but had a period of withdrawal and needed a lot of individual attention to stimulate her. Progress rated by the staff and myself as +1.

3. Feeding:
During the three months period, mother’s feeding style got much better. She made an effort to feed her regularly and provided a reasonable diet. There were however, chewing and swallowing problems. Sabrina heaved and vomited, so a food liquidiser was provided by the Charity Organisation Society. The nursery staff reported rather slow eating, but no other problems. Improvement rated as +1.

4. Weight:
Sabrina’s weight gain was unstable. She either gained little or remained static for the first six months. The following six months showed slow but systematic improvement. Since her weight had been watched at the nursery, she was discharged from the out-patients clinic. Improvement rated as +1.
Rating:
1. Feeding +1
2. Regular care 0
3. Mother/child relationship +1
4. Mother/child interaction +1
5. Weight and Growth +1

Follow up:
Six months follow up showed no deterioration in weight gain and in general responsiveness, Sabrina was very chesty during that time and was not attending nursery regularly. The mother had a miscarriage and felt rather low.
One year follow up showed some improvement in Sabrina’s growth and development. The parents were worried about her health, frequent colds and chestiness. The father lost his job so they reported some financial difficulties. The regular care was still rather poor.

CASE 10

There were four treatment goals:
1. Improving regular care.
2. Feeding.
4. Growth and development.

1. Improvement of regular care:

With a variety of help and support like getting food vouchers from the Charity Organisation Society, regular visits from the health visitor, regular follow-up appointments in the hospital, and frequent visits from the researcher.
helped to improve regular care to an acceptable degree. Things improved greatly when Ian’s mother’s boyfriend moved in to live with her and took the main responsibility of Ian’s care and provided a great deal of support for the mother. Ian’s growth and development accelerated and he appeared well cared for. Improvement rated as +2

2. Feeding

Feeding was carried out well according to the design programme, but was mostly administered by the boyfriend. Ian fed well on milk and took well to solids. Vomiting and diarrhoea stopped completely. Improvement rated as +2.

3. Improving mother/child interaction and relationship:

The mother did not feed Ian frequently but when she did she appeared to be warm, coaxing and affectionate. She played and talked to him often and formed some attachment to him. She even enjoyed watching him laughing and kicking. Improvement rated +1.

4. Growth and development:

Ian was discharged from out-patients clinic at one year two months. He did not present any weight, growth or developmental problems. Improvement rated as +2

Change in circumstances

Soon after the case was closed the boyfriend was arrested for stealing. The mother became depressed, disillusioned and gradually slipped back into her old ways. Ian however, looked well and did not show any signs of deterioration.
The mother requested short-term fostering for her three children, as she could not cope either financially or emotionally. The Area Social Services placed the children in two different foster homes. The mother visited Ian very seldom and after two months she decided to give him up for adoption. She felt that he would only benefit if he had a stable home and affection which she could not give. Ian was adopted six months later.

Remarks:
This case strongly suggests that whilst personal support and help was provided by the man she cared for very much, the quality of her life improved dramatically, which in turn brought about satisfactory care and affection for Ian and the other children. Once that was terminated, she found herself incapable of caring and loving Ian. I feel that one thing was achieved. She became far more aware and conscious of the children's needs and was able to make constructive decisions before stepping back into passive neglect and deprivation.

Rating after Ian fostered out:
1. Feeding +2
2. Regular care and financial difficulties +2
3. Mother/child interaction -1
4. Mother/child relationship -2
5. Growth and weight. +2

Follow up:
Only a six months follow up was done while Ian was in the foster home. His growth, development and behaviour were maintained well. The mother visited him only occasionally.
Ian was adopted since the first follow up and the contact with the child was lost.

**CASE 11**

Geraldine is the only child in my sample where treatment took place mainly in the hospital. There were three areas of treatment.

1. a. To deal with Geraldine’s food aversion by systematic desensitisation.
   
   b. To teach her eating skills.
   
   c. To reinforce eating.

2. To provide stimulation to help her catch up with development, especially with language and to reduce lethargic and withdrawn behaviour.

3. To help her mother to reduce anxiety, tension and obsessional thoughts of Geraldine dying.

**1. Treatment in hospital:**

Desensitisation and eating training took two and a half months. It was a slow tiring process, Two nurses were helping me on a regular basis. The schedule of treatment was closely observed stage by stage. During the first and second week, Geraldine was playing with food, looking at it or pushing the dish away. She was observing two other children eating. Remarks were made regarding other children’s enjoyment of food. She began to drink milk, orange juice, tea etc. During the third and fourth week, she began to eat a little e.g. two chips, four peas, two spoons of yogurt per meal. During the fifth week the amount increased, also a variety of food like meat, cheese,
soup. At this stage we began to prompt and encourage her more. The sixth and seventh week showed marked improvement e.g. for breakfast she would have an egg, a piece of toast and milk. She was moved from the balcony to the ward to eat with other children and her mother started to supervise her during the lunch time. She did not eat much during each mealtime, but she began to ask for food between meals and would have a snack whenever she wanted. She also began to put on weight steadily. The process was slow but went according to the planned treatment programme. During the first months, my main problem was to deal with the paediatrician's anxiety 'is it going to work?' The weight loss was observed closely. Secondly, there were days when we could not find 'well eating models'. After two and a half months Geraldine began to eat most of the things and eat well. She was discharged home, reaching appropriate weight for her age. Improvement was rated as +2  

2. Development and Behaviour:

Geraldine spent seven months in hospital. Apart from eating problems, there were other worrying aspects about her institutionalised behaviour. She was getting detached from her mother in spite of her everyday visiting. She seldom saw her father and brother. She was either withdrawn or aggressive to other children or nurses. Her language development was very poor. During the second part of the behavioural treatment attention was paid to provide meaningful and continuous stimulation by a) nursery nurses, b) mother, c) nursing staff. Once she became more energetic she began to
participate in play activities and general ward life. She became more alert and happy and her behaviour became more organised. When discharged home, she adjusted very quickly to home life and routine. There were no major difficulties and mother coped well. Both father and the brother made an effort to interact with her constructively and affectionately. Improvement rated as +2.

2. Programme for the mother:
Extensive help and support was provided for the mother to reduce anxiety throughout the hospitalisation period. Relaxation exercises were particularly helpful in reducing painful tension, like tummy ache and increasing ability to relax. Improvement rated as +2.

Thought stopping technique was tried with moderate success. When Geraldine looked worse, mother would persistently think that she would die, regardless of reassurances. Occasionally she could switch off her attention and thoughts preoccupation. Improvement rated as +1.

Growth and Weight:
Since Geraldine was discharged home there were no problems whatsoever, she was growing and developing well. She was discharged from the hospital and my follow up at the age of three and a half years.

Rating:
1. Eating +2

Behaviour
2. Lethargic +2
3. Withdrawn +2
DEVELOPMENT

4. Language  +2

MOTHER:

1. Reducing tension and anxiety  +2

Growth and weight  +2

FOLLOW UP:

Six month and one year follow ups indicated that the progress has been well maintained and no other problems have occurred since.

CASE 12

There were three main areas of concern:

1. Gail’s acute refusal to eat.
2. Lethargic behaviour.
3. Serious weight problem.

The programme was devised mainly to deal with eating problems. It was felt that once Gail would begin to eat more and regularly, she would put on weight and consequently would become more energetic. The aim was:

1. To change stimulus conditions
2. To reinforce Gail’s eating.
1. Both parents worked hard to re-direct the attention from Gail's not eating, to when she attempted to eat. They ceased to make remarks prior to and during mealtimes. They managed to control their anxiety and made mealtimes more relaxed, free of pressure on Gail. The mother was using the relaxation tape an hour or so before the main evening meals and found that helpful. Improvement rated as +2.

2. Reinforcing Gail's eating:
Gail responded well to the sticker chart and further reinforcements, like trips to the swimming pool, visits to grandmother, extra game or story. The first four weeks showed good improvement in the amount she ate and the effort she made to earn a sticker and then the treats. She began to gain weight systematically and became more energetic. She started to play with other children, outside the house, stood up for herself and was reported to be more lively at school. The parents were delighted seeing her laughing and arguing, something seldom observed before. Her eating and behaviour improved after three months of treatment. - Rated as +2.

3. Weight problem
Gail was followed up in outpatients clinic to observe her weight gain. After nine months, her weight became satisfactory and the case was closed. Improvement rated by the paediatricians as +2.

There were three setbacks in Gail's eating, each had occurred after illness. It took her a week or more to start eating well again. Those episodes have always caused
anxiety in the mother, fearing that Gail might revert to her previous difficulties.

**Rating:**
1. Eating +2
2. Lethargic behaviour +2
3. Weight and Growth +2

**Follow up:**
Six month and one year follow ups indicated that the progress was well maintained, Gail occasionally ate less, especially after illness, but both parents were not worried about it. Her weight was good and she was progressing steadily.

**CASE 13**

The goals of the treatment consisted of:
1. Acute feeding problems.
2. Temper and irritability.

1. Eating
   Jodie’s acute feeding difficulties improved somewhat, but I was unable to establish a reliable management programme to which he would respond regularly. For example he would respond most awkwardly to a previously highly successful handling for no apparent observable reason and would refuse food totally for two to three days. However, those 'no eating' episodes almost diminished after nine months. The mother’s flexibility in trying and coping at the latter stages of treatment were exceptionally good. There were still days
when he ate very little and was difficult to manage. In spite of this his weight was steadily increasing. At the end of the treatment improvement was rated as +1.

2. Temper and Irritability.

Jodie's frequent screaming fits and general irritability were reduced to acceptable levels in all but two areas:

a) when mother wanted him to stand up or try to walk him.

b) when mother persistently tried to feed him during his 'hunger strikes'.

His interaction with Scott became more friendly as a result of mothers more positive attitude towards Scott. The mother firmly and consistently carried out the management programme.

Improvement rated as +1.

Remarks:

Jodie showed persistent instability on a motor level. He appeared to be frightened to stand up and later to walk usually crying as though he was in some pain. He was fully assessed at the Paediatric Assessment Centre but nothing significant was found.

Rating:

1. Eating +1

2. Sibling/child interaction +2

3. Temper and irritability +1

4. Weight and growth +1

Follow up:

During the first six months the family moved from Leicester, and the case was transferred to the local hospital. Recent follow up information established physical reason for failure-to-thrive.
Jodie was classified as physically handicapped having some muscular defects. Since he has been treated for it, his eating has improved remarkably as well as his general behaviour and development.

CASE 14

The goals of treatment consisted of:

1. Eating problems
2. Sleeping

1. Eating:

During discussions Mrs Hall was advised on how to handle Ben at mealtimes in a more casual manner of fact way and avoiding the tension which had built up in the past during mealtimes. Mrs Hall said that she was now able to accept a calmer attitude toward's Ben's feeding problems and even before the introduction of the actual treatment programme for Ben, she was feeling more relaxed. Although initially Ben's feeding had not improved, Mrs Hall's attitude towards it was easier.

In the first few days following the introduction of the programme for Ben, Mrs Hall found that there was an improvement in the amount of food Ben ate. Only on two occasions did she have to with-hold his sweet. Apparently Ben could not understand why he was not allowed to have 'Ribena' but eventually Mrs Hall overcame this by pretending not to understand his requests. This was perhaps a further indication of the improvement in Mrs Hall's attitude.
Ben is eating better now and sharing more in the type of food the family eat. Mrs Hall was a little surprised, but pleased, that his range of food had widened. He was now eating foods which she had not previously considered giving him. Improvement rated as +2.

2. Sleeping

Dealing with sleeping problems presented some difficulties and it took almost two months to come to some constructive parental agreement as how to handle Ben. The mother found it difficult to ignore his crying but was determined to do so. His father considered this was cruel and would bring him into their bed. This was further aggravated by grandparents visits who did not agree with the management. In view of this controversy I decided to terminate the sleeping programme. However, two months later, I was asked for assistance as they could not cope with night problems any longer. After two weeks of persistent and consistent application of management technique, Ben’s sleeping improved to a manageable level, waking once or twice at night, but settling down again after having a drink.

Improvement rated as +1.

Weight gain:

Ben was discharged from out-patients clinic after eight months of follow up, reaching a satisfactory weight.

Rating:

1. Eating  +2
2. Sleeping  +1
3. Weight and Growth  +2
Follow up

Six months and one year follow up showed good maintenance of the progress and no other problems occurred.

CASE 15

Jamie's treatment was dealt with on an advisory basis. A formal treatment programme was not used. During the assessment period, direct advice was given as how to deal with: eating, defiance, crying and sleeping. This unusual procedure was applied for two reasons:

1. The mother was going for a month's holiday to Scotland.
2. She was desperate for help now and then.

On the mother's return from Scotland, she reported marked improvement in Jamie's eating and other target behaviours. Two weeks later he was seen in out-patients clinic and had put on three and a half pounds in weight during the last two months. The mother felt confident that she could cope, following our advice and that she would be in touch if faced with any difficulties. The researcher was to see her monthly at the out-patients clinic. The researcher received three calls regarding minor difficulties with sleeping and reviewed the progress in the out-patients clinic. Jamie was doing well both putting on weight and behaviour wise. The case was closed six months after referral.
Rating:
1. Eating +2
2. Defiance +2
3. Crying +1
4. Sleeping +1
5. Weight & Growth. +2

Follow up:
Six months and one year follow up showed improvement in sleeping from +1 to +2 and crying from +1 to +2. No other problems were reported. Weight and growth were satisfactory.

CASE 16

Treatment goals consisted of
1. Eating problems.
2. Defiance.
3. Commanding.
4. Physical and verbal aggression.
5. Low frustration tolerance.

1. Increasing good behaviour:
The programme was carried on by the mother and supported by the whole family with commitment and enthusiasm. The mother prepared a star chart with Kathy and her sisters and also organised a 'shop' with rewards. Kathy was encouraged
by everybody in the family as well as friends, to behave well. She began to respond to requests, became more calm and less violent. Her play was structured purposely to keep her occupied. Her good behaviour increased during three months of treatment to a pleasing level of +2.

2. Reducing bad behaviour:

Defiance, demanding, commanding, physical and verbal aggression and low frustration tolerance.

The target behaviours appeared to have been resolved for the time being. Kathy was not presenting as many problems as before and in nothing like the frequency and intensity. Both parents now had far greater understanding of Kathy and a range of techniques to use when she presented problems. Kathy herself is a much happier girl both at home and at playgroup and is beginning to have a vested interest in maintaining her good behaviour. Inconsistency between the parents especially with the use of 'Time Out' had been resolved at the early stages of the treatment, and the management of Kathy was good. Kathy was a difficult child to manage but as long as the parents would stick to the management principles, which they had now mastered well, Kathy's good behaviour should be maintained. An intensive treatment took three months, during which defiance, verbal aggression and low frustration tolerance diminished completely. Physical aggression and commanding decreased to acceptable levels: success rated as +2.

Eating:

Eating problems resolved within four weeks, and there were no difficulties experienced, success rated as +2.
**Weight:**

Kathy's weight is still not up to the required standards, but she is putting on weight systematically although not much. Out-patients visits were terminated after ten months of follow up.

**Rating:**

**Target behaviours**

1. Eating +2
2. Defiance +2
3. Commanding +1
4. Physical aggression +1
5. Verbal aggression +2
6. Low frustration tolerance +2
7. Mother/child interaction +2
8. Mother/child relationship +2
9. Father/child interaction +1
10. Father/child relationship +2
11. Sibling interaction and relationship +2
12. Growth & Weight +1
Follow up:

Six month follow up indicated that a satisfactory progress was being maintained. Kathy was still at times aggressive and commanding, but the mother felt confident in her management, the 'Time Out' was used occasionally.

One year follow up indicated a well balanced management of Kathy and a satisfactory progress continued to be maintained.

CASE 17

There were five goals in this case:

1. Eating
2. Mother/child interaction
3. Increasing stimulation and socialisation
4. Marital problems
5. Mother's tensions and anxiety

1. Eating:
At the time of my intervention, the child did not present major eating problems and minor difficulties were resolved very quickly by establishing a more relaxed atmosphere at mealtimes. Eating improvement rated +2.

2. Mother/child interaction:
During the first two weeks of treatment he showed little enthusiasm in play, despite the efforts put into this case. The mother was feeling very low and tired. Gradually with her husband's help and by using relaxation exercises, she became more relaxed and lively. Gary began to approach his mother with greater ease. He played and talked to his
mother more often and happily. His withdrawn behaviour
ceased with the change of the mother's moods. Their
relationship ceased to present any problems. Mutual
interaction became spontaneous and positive.
Improvement rated as +2.

3. Increasing stimulation and socialisation:
Gary started attending a play group and adjusted to it
well. The play group staff found him easy to manage and
amuse. His speech and play skills improved quickly. He
related to the staff and to the other children well.
Improvement reported in speech, play and ability to relate
by the staff as +2.

4. Marital Counselling:
At the time of referral the marital relationship stabilised
somewhat, but there was still a lot of bitterness and
friction. The father was blaming his wife for leaving him
and the children, he was also questioning her concern and
feelings towards the boys. The mother felt she was unable
to tolerate his irresponsible behaviour prior to the brief
separation. The main aim was, to increase and improve their
communication, set up joint tasks to work on, control
impulsive hurting behaviour and increase pleasurable
activities and sexual relationships. After six sessions
they reported that they felt much closer, being able to say
what they felt and what to do about it. It appeared to me
that they functioned much better as a couple and parents.
They go out now together, have started to decorate the
house, and they report to have a more satisfying sexual
relationship. Improvement rated as +1.

5. Reducing tension and anxiety:
The regular use of the relaxation tape helped the mother to keep calm and control tension. She became able to sleep better and to rest more easily. Improvement rated as +2.

6. Weight:

Gary's weight was recorded during a regular out-patients visit to the clinic. He has made a remarkable progress after seven months so the case was closed.

Rating:
1. Feeding +2
2. Mother/child relationship +2
3. Mother/child interaction +2
4. Development and socialisation +2
5. Marital relationship +1
6. Tension and anxiety +2

Follow up:

The six month and the one year follow ups still continued to show some marital frictions, mainly caused by the irresponsible way the father spends the money. However, he had been working for the last eight months. There were no problems with Gary. His growth and development was good and no other behaviour problems were reported.
CHAPTER 11

An Independent Follow-Up Study of a Behavioural Casework Intervention and the Mother's Perception of its Efficacy.

The following account is a necessarily shortened version of a report provided by Judith Adams a mature Psychology Honours finalist and trained nurse. It is based upon her research dissertation, examined and passed in the Psychology Department, University of Leicester. This part of the study was planned in order to investigate perceived change (or lack of it) on the part of the consumer, viz, the mother—rather than veridical aspects of change, in a treatment programme. It looked at process as well as outcomes.
The mothers of thirteen children who had been subject to the intervention designed to alleviate their 'Failure-to-thrive' were interviewed by independent judges to determine (i) how the situation was at home at the time of the interview; (ii) to discover how the situation was prior to, during, and post intervention as perceived and recalled by the mother.

An independent evaluation was carried out by four final year Honours degree psychology students intending to go into Clinical Psychology (age range twenty to forty years). They were informed about the approach (Herbert, 1981) but kept ignorant of the author's conclusions about change in particular cases. The aim of the independent evaluation was to assess the outcome of treatment. The students had no previous contact with the families studied and it was hoped they could draw 'objective' conclusions with regard to the methods of treatment and the long term results. Since these cases were closed (apart from a routine supervision of those who were on the 'At Risk' register) this study aimed to investigate the situation at present and the mothers perception of it in relation to the status of the child at the point of termination of the treatment.
The judges compared the mother's and the researcher therapists perception of the situation at the termination of treatment and in addition the mother's perception and memory of her total experience. Finally, they investigated whether any other problem behaviours (symptom substitution) had occurred. The researcher was concerned to find out about each child's growth and development and the mother-child relationship and interactions, at a point of time considerably distant from treatment termination. Considering that ten out of seventeen subjects had been on the 'At Risk' register and all seventeen subjects had been seriously underweight, presenting acute feeding problems and experiencing (in several cases) various forms of deprivation, it was felt to be of the utmost importance to find out whether the improvements had been maintained. Independent answers to the question of the mother's or both parent's perception of the intervention seemed to be of some importance. After all the parents were aware that the social worker had an authority and the duty to protect the child, and if necessary the power to remove him from the home by applying for a Care Order. This authority potentially militates against the more 'democratic therapeutic partnership' philosophy inherent in behavioural casework (see Herbert, 1981).
Subjects

The original number of subjects was seventeen children. Since one child was adopted soon after the termination of the treatment sixteen were available for evaluation. A word should be said regarding the three children whose mothers were not seen, as the shortfall brings to light important points. One child who had a fruitless behaviour therapy intervention (evaluated by the author as a failure overall) has subsequently been diagnosed as physically handicapped by a paediatrician in another health region and as having deformed stomach muscles. This case shows up possibility of a mis-diagnosis even after a full medical screening. One mother refused the interview. She said that everything was fine now and, indeed the child looked perfectly healthy. The independent judge commented that perhaps this lady was exhibiting a more extreme form of the generally 'poor memory' seen in these mothers wishing to forget (or deny?) their past experiences. Of course, it might simply be an understandable resistance to the intervention. Another two families could not be traced or contacted until it was too late to include them in the follow up study. This left thirteen mothers and children.

There were six boys and seven girls with an age range of three to seventy two months in the independent evaluation. The duration of programmatic intervention had ranged from one and a half months to eighteen months; and the length of time since treatment varied from fifteen to sixty months.
Method

The method used for collecting the information was the semi-structured interview. This method was decided on for a number of reasons. It enabled the interviewer to conduct the research in a natural setting. The interviews were carried out at the family home and so some assessment of home conditions could be made. The interview enables the researcher to conduct a face-to-face interaction with the client. Rapport can be built up and also probes made where the client can be encouraged to expand on her information. Also it enables the researcher to get the meaning of his question over to the client. The great advantage of the interview is its flexibility. The information was gathered by means of a questionnaire. Appendix IV.

The Questionnaire

The questionnaire has a number of advantages. It is more reliable when different interviewers are used since all areas of enquiry can be organised and covered before the interview. It can be structured so that the interview follows a natural, and yet structured pattern designed to coax out maximum information. The questions can be designed so that some form of quantitative as well as qualitative analysis can be made.
The main aims of the questionnaire were:

1. To establish how the child was now, in both behavioural and physical characteristics and the relationship between the various family members.

2. To discover how the situation was before therapy began as perceived by the mother.

3. To discover how the mother felt about the therapy programme and to whom she attributed its success or failure.

4. How she perceived the situation at the end of the programme.

The questionnaire itself was a mixture of precoded and free response questions. Where coding was possible a Likert form of scaling was used ranging from -2 for very negative responses, -1 for moderately negative, 0 for no change, +1 for moderately positive and +2 for very positive responses.

The questionnaire itself was divided into sections as per aims stated above. The first questions were designed to ask generally how long ago treatment ended and how long it had continued. It then moved on to ask how the situation was now and if any of the behaviours had reoccurred. The mother was then asked if she felt she could cope and how the relationships were at present between family members. Then specific questions were asked about the the child's development now.

Having hopefully established an interest in the family as it stood now, reference was made back to the start of the
therapy and we asked what was happening then, how long it had been going on, and how the mother felt about it and tried to cope. The independent judges then asked what problems she and the author had decided to concentrate on and what they did in terms of treatment, e.g. rewards and sanctions. They then asked how difficult she found the programme and what they expected from it. They then tried to discover the mother's attributions with respect to the success or failure of the treatment and, assuming it was successful, generally how confident she was of permanent and progressive improvement. These questions were scaled where possible. Then followed a series of unscaled questions designed to tease out the mother's feelings and attitudes towards the therapy programme and the operator. Finally, the judge sought to assess the mother's perception of the situation when the treatment was terminated.

The questionnaire wording was made as short and as simple as possible. Double negatives and double barrelled questions were avoided. It was decided that any interview should not exceed an hour if possible.

Initially, a meeting was arranged between the Research Supervisor, the researcher and the four interviewers. A programme for the study was arranged. Objectives for the questionnaire were formulated. The interviewers then collaborated on a pilot questionnaire which was presented for review by the supervisor.
Concurrently, the researcher wrote an introductory letter to the parents and the interviewers were assigned four cases each. Following the review of the questionnaire a final composite questionnaire was compiled using the best of each and presented for acceptance. It had been suggested that each interviewer experienced an interview rehearsal but unfortunately, there was no time for this. Various conditions were agreed on in conducting the interview. Absolute confidentiality was to be maintained. Any questions that appeared to markedly distress respondents were to be abandoned. Flexibility could be used as long as the main questions were posed. Notes were to be taken, provided the interviewee gave consent. No advice was to be proffered and referral made to the researcher if parents requested it.

The interviewers then contacted the respondents and appointments were made and the interviews carried out. The information was then pooled, collated and analysed. Then an interview was held with the author who gave her own assessment of the cases at termination of treatment based on the casenotes.

Results are as follows:

Of the thirteen mothers interviewed, nine reported that they had observed clear improvements in their child after the Child Treatment Research Unit type intervention. Three of the remaining were said not to have shown any change, and of these, two were subsequently placed in foster homes. The clearest improvements were seen in those
cases where the behaviour modification programmes were most carefully executed with maternal co-operation.

Overall, it appeared that improvement had been maintained. For twelve subjects, eating was reported improved. Ten mothers felt more positive to their child now but two felt negative. Eight/eleven felt the relationship had improved. However, nine still reported worrying about the child, while only five were positive that problems would not return. While ten thought they could cope, five indicated that they would need help.

No mother reported a more negative relationship between the child and other family members. Eight of the ten spent more time playing with the child and none spent less time. None reported less physical contact with the child, or feeling less comfortable in the child's presence. All reported that the child came to them for comfort. Five of the eleven had an improved social life and eight of the ten had maintained the same relationship with their other children. No worsening relationship between the child and other family members were reported.
All reported that the most worrying behaviour at the time of referral was food related and for ten of the eleven cases, these children were the only ones in their respective families with this problem. For ten, the problem had been going on from birth. All twelve natural mothers were very worried about this behaviour and tried to cope with it by coaxing, pushing food frequently and force feeding. Ten out of twelve were very negative to the child then, were worried, and frustrated, ranging from feeling extremely hostile at times to feeling rejected. For four informants, only occurred with the mother but answers were mixed here. The problems concentrated on were seen as: mainly eating, and five for other problems. Six out of seven reported the use of the star chart. Sanctions were 'no stars' and 'time out'. Five found the programme difficult to stick to. Four mothers saw themselves as running the programme. Two had confidence in the project, five had little faith and two thought a miracle would happen.

These were the perceptions at the beginning of the programme. Seven concentrated on wanting a child who would eat, and four, just a normal loving child. Only one mother saw it as a means to helping her to regulate her own behaviour to the child.

Attributions for reported success were mixed, but five mothers did see themselves as responsible for successes.
At the end of the programme, 5 saw it as a success, 5 still had some problems. New problems had appeared in 4 cases. 5 reported lapses during the programme. A Binomial test was performed on all questions where quantitative analysis was possible, but the data was collapsed into the categories of 'worse', 'Same', 'Better', and for each test one group was compared to a combination of the other two. The Binomial test was chosen because data was non-parametric and the test was suitable for an A-B design of this type, where the expected frequency is small.

Discussion
There was significant improvement in 11 of the above areas namely, overall situation, feelings towards the child, relationship, time playing with the child, ease in the child's presence, child's relations towards mother, child's relations towards father, wife's relations with husband, food intake, physical appearance, cognitive change.

A matched pairs t-test was performed to compare the therapist's perception of the situation at the end of treatment with the mothers. The researcher's perception was significantly more favourable than the mothers (p<0.05 two tailed). A t-test was also performed comparing the mothers perception of the situation now, with the situation at the end of the intervention; it was not significant suggesting that the mother perceives no significant change in behaviour since the end of the programme.
Other t-tests were performed between various question responses. Details are given in Appendix I.

There was a significant difference between feelings to the child now, compared to before intervention (p<0.01 two tailed). Relationship to X compared to other children now had significantly improved (p<0.01 two tailed). A Spearman Rank Order Correlation was conducted between those parents with negative expectations and difficulty in sticking to the programme but the results were not significant.

Eight thought the child would have died with no intervention. Only two reported fear she would abuse her child.

Four of the eight would repeat the therapy but five had mixed feelings about it. Seven urged parents in the same situation to persevere. Six saw their role as passive and two did not feel involved at all.

The judges agreed that their findings indicate that the hypothesis that, on the whole, the improvement had been maintained in those cases which reached a successful termination appears to be supported. Indeed, the fact that no child died or was re-admitted to the hospital is most significant! However, analysis of the data also suggests that the situation is not necessarily cut and dried since nine mothers still report anxiety about their child and only five were positive that problems would not return. Also only four mothers saw themselves as therapists.
All mothers felt, however, that they would be able to cope with any difficulty that might arise, as they considered that the Child Treatment Research Unit approach would always provide support even though all formal contact might have ended some time ago. Every mother (even those who felt that the treatment had failed) remembered having liked the author and this was felt to have been an important factor in those cases where success had been achieved.

Despite the fact that a good relationship had existed between them each mother and the author, however, over half of the group claimed that they had found the behaviour modification programme very difficult to run, and in only three cases was there evidence of an adequate understanding of the basic principles of social learning theory. As we saw earlier, only four mothers felt themselves to have been part of a 'therapeutic team', and it was commonly felt that the author was 'in charge' and had to be 'obeyed' without question. (This is an important point in view of the author's perception of her treatment philosophy and reflect the exigencies of work with 'At Risk' cases.)

Although based upon a relatively small sample of Ss, the present study yielded a wealth of information, and at the same time, also raised a number of very interesting questions.

Perhaps one of the most striking findings was the fact that there were such great variations in the way in which each
mother approached, and coped with, the task of running the behaviour modification programme. At the one extreme there were those who actively took on the role of 'co-therapist' drawing the whole family into the venture (i.e. the father and the siblings of the target child); whilst at the other, there were those who felt that they themselves did not have to do anything in order to bring about changes in their child's behaviour, thinking that the author was 'totally in charge, and running the whole thing'. There was even one case of a mother denying all knowledge of a programme even though great attempts had been made to introduce her to the practice of using star charts etc.

It is probably more than coincidence that the mothers who tried to run the programme conscientiously were also the ones who reported having seen the most change in their children's behaviour. This observation might be interpreted in a number of ways. It could, for instance, be considered as evidence of the fact that, when applied correctly, behaviour therapy will invariably prove to be effective. On the other hand, however, it could also be claimed that the mothers willing to make the greatest efforts were those who cared the most about their children, and that improvements were achieved largely because of this, rather than as a result of any treatment.

Regardless of the way in which these findings are explained, it must surely be acknowledged that the part a mother plays in therapy is absolutely vital, for it is
she who will ultimately have the greatest influence upon
the child. Also, it is important that the mother is
instrumental in bringing about any changes that occur
because she feels that she is 'being controlled' she will
come to think of herself as an incompetent failure.

The majority of parents referred to the Child Treatment
research Unit feel depressed and helpless, and it is
necessary that they regain their self esteem in order for
them to be able to help their children. Furthermore, the
results of the present study indicate that mothers who work
actively with therapists are more likely to be optimistic
about the future, for having proved themselves capable of
managing their children, they have enough confidence to
feel that they would cope adequately with any subsequent
problems.

In view of the fact that it is clearly so important that
the treatment programme be run properly, it was somewhat
disturbing to find that in a large number of cases, the
mothers involved in this investigation quite clearly did
not appreciate what was required of them. Only two found
their roles relatively easy to cope with and showed that
they really understood the social learning theory
rationale. The remainder either found the procedures
tiringly complex and incomprehensible, or felt that they
had no control over their children and that they were being
'monitored' by the author. It is obviously essential that
the mothers know why they are asked to fill in a star
chart, keep a diary, or use 'time out' etc., for if they do
not, they are unlikely to be good therapists regardless of how well-intentioned they are. It might thus be advisable for the Child Treatment Research Unit to take greater steps to ensure that future clients better understand the treatment methods and have clearer ideas about the roles they are expected to play.

As the 'triadic approach' encourages the parents to feel that they are 'in charge' of their own children and responsible for any improvements that are seen, it is vital that full support is given when 'set-backs' occur; for if the mothers feel that they are running the programme, they might well blame themselves if things go wrong. The findings of this study indicate, according to the judges, that, in this respect, the service provided by the Child Treatment Research Unit approach is more than adequate, and the majority of mothers reported that the sympathetic advice which they received prompted them to persevere even when all of their efforts seemed to be fruitless.

Indeed, in two of the failure-to-thrive cases where Ss were too young to benefit from full programmes of behaviour modification, all problems were alleviated by a 'therapy' consisting only of a series of counselling sessions held between the author and the respective mothers. Although these Ss might well have improved without the intervention, the families involved stressed the fact that they were helped considerably when they knew 'that there was someone who would listen without passing judgement'.
Whilst the results with the feeding disorders might appear encouraging, it must be noted that only very limited success was obtained in four cases where failure to thrive was accompanied by serious and various conduct disorders — at least with regard to the latter. The mothers of two of these Ss considered the therapy to have had a marginal effect, but at the same time reported that certain unwanted behaviours had remained very much in evidence. In the other two cases the programme was seen as a total failure; no change was observed in either of the Ss, and both have since been placed in foster homes. These findings, whilst not necessarily casting doubt upon the efficacy of the behavioural casework approach serve to emphasise the problems associated with the treatment of conduct disordered youngsters, and in so doing should alert the social worker to the difficulties that she is likely to face when dealing with such cases.

The independent study was based of course upon an extremely small, heterogeneous sample of Ss, and as such it is difficult to assess how far the findings can be generalised. Indeed, even if dramatic changes for the better were reported to have occurred in every case, it would not necessarily follow that this was due to therapeutic influence rather than to other possible influences. Furthermore, in that it examined the mother's perceptions of her child the investigation was, by its very nature, subjective. Parental opinions regarding change are by far the most simple measures of outcome to obtain, but as Herbert (1981) has emphasised, such ratings are only of
real value when employed to complement other measures. These 'harder' measures (e.g. weight gain, re-admission, graphical records) were used in the actual conduct of the cases in the routine work of the paediatric social worker.

Finally, in addition to yielding 'hard data' that lent itself to statistical analysis, the present study also brought to light a number of interesting points which, although they could not be 'measured' in any way, are nevertheless worthy of serious consideration. Perhaps one of the most important of these was the fact that the majority of the mothers felt themselves to have been treated very harshly prior to the point at which the hospital paediatricians and social worker intervened. In many of the failure-to-thrive cases, the Ss had been experiencing difficulties for a considerable time before any practical help had been made available. These mothers claimed that they had repeatedly requested their G.F.'s for assistance, only to be told that the child 'was going through a phase', or that 'they should persevere and things would improve'. It was only at the point when their children were desperately near to death that the medical profession began to treat their pleas seriously. This was indeed a most worrying finding, and it is an urgent necessity that, in the future such mothers do not get pushed aside and regarded as 'neurotic nuisances'.
Another point worthy of a brief mention is that the greatest, and indeed the most rapid improvements were seen in those cases where clinical intervention had commenced whilst the Ss were very young. Furthermore, it seemed that, on the whole, it was only in the older children that any serious conduct disorders were present. (see Appendix V, for statistical analysis)
SECTION V

CONCLUSIONS AND DISCUSSION
(i) Psychosocial Comparisons

Children who fail to thrive (as contrasted with those whose failure is associated with identifiable organic factors and children whose thriving was not a source of concern) manifest the following characteristics:
A. Demographic

1. They tend to come from larger families (a trend not a statistically significant difference).
2. They fall into no particular pattern of ordinal position (i.e. first-born v other positions).
3. They are not disproportionately represented by a particular social class.
4. They tend to come from inadequate conditions of living (e.g. housing, hygiene, etc).
5. There are more financial problems in their homes (on supplementary benefit and/or low income).
6. More of their parents tend to mismanage what income they do receive (p<07).
7. More of their parents go out to work, although they represent a minority (forty two percent) of the index cases.
8. They fall into no particular pattern of family structure (i.e. single parent v two parent families).
9. Like the organic failure-to-thrive group, the parents cannot call on as much extended family support as can the 'normal' control groups.
10. This isolation and lack of support is wide based and relates to friends and neighbours, with the non-organic failure-to-thrive families being in a worse plight than the organic group, and (markedly) the 'normal' group.

*differences reach a statistical level of significance (p<05) unless otherwise stated.*
B. The Home and Family

The parents of children who fail to thrive manifest (in the contrast situation) the following characteristics:

1. They tend often to have marital relationships/partnerships which are marked by friction, quarrels, limited emotional input, sharing etc/ (This reflects a trend to marital disharmony in their homes of origin).

2. They tend to produce families which are less united and less cohesive (especially in terms of crises) than contrast parents. They function more often as individuals rather than as members of a family groups with mutual obligations.

3. The mothers come from backgrounds in which their experience of parental role models (as indexed by parental competence, acceptance, concern and care—physical and emotional) was often inappropriate and faulty.

4. The fathers likewise— but not to such a marked degree—have experienced disadvantage in their early, formative years.

Footnote: A trend only; not quite at a statistically significant level.
C. Personality Factors:

The mothers of children who fail to thrive (as contrasted with standardisation groups described in the manuals, and with the two control groups) show the following characteristics:

(i) 16PF:
Although they display individual differences and extremes in the scores they obtain, their average pattern of sten scores is close to a normative sample of 1113 British Females (Mean age 37.6 years, SD 15.7) indicating that the index group mothers present an average personality profile with regard to all but one dimension (intelligence, abstract thinking, standard score 6.2) which is above average. They do not differ in any systematic way from the special control groups. The same applies to the Second-Order analysis.

(ii) Eysenck Personality Inventory (EPI)
(a) Neuroticism: They do not differ (at a statistical level of significance) from control groups in neuroticism although they do obtain higher scores (M=16v14 & 13) the average scores obtained by all groups fit better with the distribution of scores of a standardisation population of neurotics rather than normals (see EPI Manual). (15.796 v 9.065)
(b) Extraversion: They do not differ (at a statistical level of significance) from control groups in extraversion-introversion, although they are somewhat more introverted on average. The average score obtained by the index group (12) is the same as that obtained by a standardisation population of normal subjects (12.070).

(iii) Anxiety: They do not differ (at a statistical level of significance) from the control groups on state and trait anxiety although they obtain higher scores on both of these dimensions.

The mean trait scores (45) of the index group are higher than the average obtained by a standardisation population (American) of 'normals'. The trait anxiety scores are very much akin to the obtained scores of patients with psychiatric complications (44.62). The mean state anxiety scores (47) are also akin to the average scores (48.08) obtained by psychiatric patients with anxiety reactions. In other words index group mothers are high on items revealing 'transitory emotional state or condition of the human organism... characterised by subjective, consciously perceived feelings of tension and apprehension, and heightened autonomic nervous system activity'. A-states may vary in intensity and fluctuate over time.

A high correlation (r=0.44; p<0.01) was obtained between neuroticism and trait anxiety scores obtained by the index group and suggests some predisposition to react to stress with anxiety.
D. Mother-to-Infant attachment

The mothers of children who fail to thrive manifest (in the contrast situation) the following characteristics:
1. They report more often a disturbance in their sense of the child belonging to them (i.e. one index of 'maternal bonding').
2. They express less pleasure in the baby, less sense of the infant being lovable (i.e. another index of bonding).
3. They spend less time interacting with the child (outside the time devoted to basic care).
4. They do not devote as much time to picking up, talking to, and smiling at the baby.
5. When they do so they report a lack of pleasure in these activities.
6. They are less demonstrative in showing affection toward their children.
7. They play less often with their children for fun as opposed to duty.
8. They are less responsive to the baby's cries (in the sense of picking it up). This finding in contrast to others in which there are usually several exceptions, applies to 100% of the mothers. However, its significance is called into doubt as 88% of the 'normal' controls tend not to pick up the baby when it cries. The main source of difference is in the mothers of organic failure-to-thrive who tend (perhaps not surprisingly given their identifiably 'sick' offspring) to pick them up when they cry.

9. However, the index group mothers are more likely to let their infants cry for long periods of time before responding. The organic control mothers are most reluctant to prolong the baby's distress (100%) followed closely by the 'normal' controls (82%).

10. The index group mothers (41%) report difficulties in loving their children. None of the control mothers reporting such difficulties.

11. They report more instances of negative attitudes to their child.
Reliability of Information

There is a gratifyingly high level of internal consistency with regard to parental attitudes and behaviours as evidenced by intercorrelations between interview/questionnaire items.

e.g. C14 Mothers spend minimal or nil time with her child outside the time devoted to basic care.

correlates positively with:

C19 Mother will let her baby cry for a long time before responding \( (r=0.27) \)

C28 Mother’s attitude towards child is indifferent \( (r=0.69) \)

correlates negatively with:

0.18 Mother enjoys picking up, smiling at, talking to baby. \( (r=-0.63) \)

Mother enjoys baby most when little \( (r=-0.56) \)

C 23 Mother shows affection towards child \( (r=-0.26) \)

C 25 Mother plays with child \( (r=-0.44) \)

A series of intercorrelations between the various items on the parental attitudes reveals a constellation of negative experiences and/or attitudes related (at the \( p<.05 \) or greater level of significance) to the report that failure-to-thrive mothers allows the child to cry for a long period of time before responding:
<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>( r )</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.27</td>
<td>Mother's attitude towards the child is negative.</td>
<td>+0.28</td>
</tr>
<tr>
<td>C.31</td>
<td>Father's role as a care-taker is minimal or nil.</td>
<td>+/-0.37</td>
</tr>
<tr>
<td>C.34</td>
<td>Father seldom/never talks to child.</td>
<td>+0.34</td>
</tr>
<tr>
<td>C.36</td>
<td>Father's attitude towards the child is negative.</td>
<td>+0.28</td>
</tr>
<tr>
<td>C.23</td>
<td>Mother shows affection towards child.</td>
<td>-0.35</td>
</tr>
<tr>
<td>C.25</td>
<td>Mother plays with the child.</td>
<td>-0.23</td>
</tr>
<tr>
<td>C.24</td>
<td>Child shows affection for the mother.</td>
<td>-.02</td>
</tr>
</tbody>
</table>

Mother's playing with the child is positively correlated with the Mother's affection for him/her \( (r=+0.69) \) and with father's affection for the child \( (r=+0.31) \).

Father's active role as a care-taker is related to the amount of communication he has with the child \( (r=+0.39) \); his positive attitude towards the child \( (r=+0.35) \); his demonstration of affection to him/her \( (r=+0.22) \).
E. Separation Experiences.

The non-organic failure-to-thrive children:

1. Experience brief separations from mother brought about by day care in fifty percent of cases, more than 'normal' control but a little less than 'organic' cases.

2. Their day care is arranged more often because of poor parent-child relationships than is the case for other children.

3. They are more likely to be separated legally on Care Orders or given up for adoption (3 cases, viz eighteen percent).

E. 'At Risk' Register.

1. They are much more likely to be placed on the 'At Risk' register (fifty-nine of index group children).
The fathers of non-organic failure-to-thrive children present (in the control situation) the following characteristics:

1. About one half of them play an active role as care-giver with their children, a proportion not different than the parents of the control groups.

2. However, they interact significantly less with their child (smiling, talking to, picking up, him/her).

3. On the other hand, in terms of stated attitudes, they present positive attitudes towards the child (seventy-one percent of the cases) as often as the control group fathers.

Child-Parent: Child-Sibling Affection.

1. Failure-to-thrive children show less affection to their mothers and their fathers than control group children. In addition, they tend not to get on as well with their siblings.
H. Feeding

Children who fail to thrive (as compared with control children)

1. Are and have been very difficult to feed.
2. Were mainly bottle fed (eighty-eight percent) but in this do not differ from control group children.
3. Their mothers (unlike the organic control group) had no particular wish to breast feed them.
4. Were generally fed (unlike the others) on a regular feeding schedule.

I Child-Rearing-Discipline

There are few notable differences between groups in relation to various child-rearing (e.g. toilet-training; obedience training, decision making) practices. However, failure-to-thrive parents are more likely - although it involves only a few cases - to restrict the child's freedom to play; and both mothers and fathers are more likely to 'spank' frequently than parents of control group children. They tend to believe that spanking is effective.

The mothers of failure-to-thrive children scold more frequently; but are much less consistent than other mothers. This is underlined by the finding that the parents seldom agree about child discipline with father believing (in some cases) that the mother is too strict.
The mothers tend more often to favour the other children in the family over the failure-to-thrive one when it comes to adjudicating their fights.

More mothers of failure-to-thrive children expressed resentment over their maternal role and responsibilities than control group mothers.

J. The Child

The pregnancy, labour and birth in the index group (as compared with the two control groups) have the following characteristics:

1. Mothers of failure-to-thrive children have endured substantially more stressful pregnancies than control group mothers.
2. The proportion of unwanted children in the failure-to-thrive group is higher than in the control groups.
3. The failure-to-thrive children do not differ significantly from the control groups in respect of either premature or overdue or at-term births.
4. Sixteen out of seventeen children in the index group had a natural birth; more numerous complications, such as forceps delivery and Cesarean sections were reported in both control groups.
5. There was a tendency (but not a significant difference) towards shorter length of labour in the index group of cases.

6. The failure-to-thrive children experienced fewer post-birth problems than both control groups, such as breathing difficulties, special care baby units etc. They are the most advantaged group in this respect.

7. The average birth weight of the failure-to-thrive children was 6lbs 9ounces; they are somewhat heavier than the first but lighter than the second control group, the differences are insubstantial.

The failure-to-thrive children in terms of temperament, development, behaviour and feeding (as compared with the two control groups) manifest the following characteristics.

1. The failure-to-thrive children show marked differences in their temperamental characteristics, the greatest proportion of index group children fall into the 'difficult' or 'slow to warm up' categories, which can result in child rearing difficulties.

2. They are developmentally (to a statistically significant extent) behind the other groups, especially in language and social behaviour.
3. They present significantly more behaviour problems (both deficit and conduct types). The average number in the index group being 5.91 in comparison with 1.85 and 0.97 from first and second control groups respectively.

4. The most common and acute disorders are in the realm of eating/feeding difficulties. Among the failure-to-thrive children the average incidence in the index group 9.93 compared with 3.66 in the first and 1.26 in the second control group.

5. The way index mothers handle and interact with their children, during feeding, differs sharply from the control groups. They tend to be more forceful, impatient, unconcerned, neglectful or passive. Such styles are eminently modifiable by behavioural casework and counselling.

(ii) Counselling

An analysis of behavioural casework with seventeen index cases reveals:

1. Ninety-three percent improvement rate in the feeding/eating problems of the children. (sixty-four percent satisfactorily improved; twenty-nine percent moderately improved)
2. Satisfactory or moderate improvement in height and weight in most cases (see Fig. 10.1 and 10.2: page 303a, 303b).

3. That in spite of several previous admissions in most of the cases no child was re-admitted to hospital because of refusal to take food during interventions and six month follow up. One child was re-admitted after the six month period following termination.

4. The success rate overall with regard to a wide variety of target problems was eighty-nine percent. (fifty-six percent satisfactorily improved, thirty-three percent moderately improved).

5. Mother-child relationships, the major difficulty treated after feeding disorder, were improved in approximately eighty-eight percent of cases.

6. A wide variety of social and behavioural interventions was used (see Appendix III).
CHAPTER 13

DISCUSSION

Before discussing the causal dimensions of failure-to-thrive it is worth quoting Gil (1980) on the manner in which the conventional dichotomy between individual and societal causation of social problems distorts the multi-dimensional complexity of human phenomena. As he puts it.

We know that psychological forces which shape individual behaviour evolve out of the totality of life experiences in specific historical, cultural, social, economic, and political contexts. Individual motivation and behaviour are thus always rooted in a societal field. Yet societal forces are always expressed, or mediated, through the behaviour of individuals, for societies cannot act except through their individual members. Clearly, then, any human phenomenon, at any moment, involves both social and individual elements. In real life, these elements are inseparable. Their separation in theory is merely a product of scholarly, or rather pseudoscholarly, abstraction.
According to Gil’s reasoning, failure-to-thrive, like child abuse would be the consequence of acts or inactions on the part of individuals (e.g. parents), whose behaviour reflects societal forces mediated through their unique personalities. And we must not forget the infants and children themselves and their role (unwitting) in their sad fate as seriously mal-nourished beings. They are proactive, not only reactive, thus shaping the interactions between themselves and their parents, in a not insignificant way.

OBJECTIVES

This study has attempted to incorporate the spirit of Gil’s quotation although, inevitably, many of the complex (but infinitely subtle) nuances of the ‘person-in-society’ equation have proved far too elusive for the crudities of our available research methodology, especially when it is constrained by the realities and ethical considerations of day-to-day service delivery in the National Health Service. There were two major objectives guiding this study: (i) to identify possible ‘causes’ or ‘antecedents’ of failure-to-thrive; (ii) to examine the efficacy and viability of behavioural casework as a social work intervention with this group of clients.
The first task in connection with (i) was to determine and examine similarities in various aspects of the failure-to-thrive children's background, history and behaviour, and also to examine differences between children who fail to thrive and the members of two control groups - one with related eating disorders and one without (and in that sense, a 'normal' contrast group).

The second task was to determine whether the mothers of the failure-to-thrive children are psychologically ill-adapted to their role as mothers in terms of their skills and/or personalities (inter alia); and whether they create adverse environmental conditions that interfere with their children's physical growth and psychological development. Fathers too, were considered. Unfortunately, because of the restricted scope of having only one person conducting an already quite massive investigation (plus the lesser role fathers are alleged to have in the presenting problem) their examination was of necessity - rather than choice - more cursory.

**METHOD**

The data was obtained by using structured interviews, questionnaires, tests and direct observations. The assessment phase was demanding and time consuming. The first part of the assessment took place whilst the child was in hospital. It involved (a) observations of the child on the ward; (b) observations of mother/child interaction during visits; (c) observations of the child's
feeding/eating behaviour; and (d) recordings of hospital staff's perceptions of the child, mother and father. The time spent on cases was varied and was determined by the length of the child's hospitalisation.

The second and most essential part of the assessment (and intervention) took place in the child's home. Twice weekly home visits, in the early stages each lasting approximately two hours or more over a period of six weeks were needed to collect the data. The overall home contact time for the assessment was, on average, approximately twenty-four hours and in certain cases (Numbers, 1,2,4,) about thirty hours.

The 'cost' however (treatment in its entirety lasted - on average- about thirteen months) must be measured in relationship to its potential benefits, which is of course the subject of this enquiry. The mutual search of mothers (parents) and researcher, for possible explanations for the child's failure-to-thrive, and the reassurance, help and understanding provided by my sharing the family's experiences and concerns were designed, not only to obtain comprehensive understanding of each family, but also thereby to mitigate the serious problems. The fact that life-and-death issues were literally involved in this work much of the time, gave decisions a particularly poignant and urgent quality, a most discomforting position to find oneself in, particularly when so little information is available in the literature to guide these decisions.
The fact that none of the families refused to participate in the study in spite of a time factor (they were 'warned' about the hard work and endurance required of themselves) and also such potentially 'threatening' aspects as doing personality tests or disclosing barely acknowledged feelings towards the child, was in some ways surprising. The willingness to participate was partly due to their desperation but also due to the advice and encouragement of the paediatricians; also I tried to impart right from the beginning that they would play a vital role as partners in the therapeutic process*.

* footnote:
My success with regard to this last desideratum is called into question by the independent evaluation. Most of the mothers were eager for help and they seemed happy that someone was prepared to listen to them without passing judgement on their value as mothers. It came as a surprise to the researcher (following the independent assessment) that mothers perceived themselves as more passive and the therapist more directive than she intended - perhaps a function of the seriousness of the problem and the fact that so many were on the 'At Risk' register.
The data collection began quite deliberately by looking at the child and thus at the problems the parents were most concerned with. The way they felt about the child was discussed usually at a later stage when a therapeutic liaison had been established. It was planned this way so as to minimise the feeling of being criticised as parents or being inadequate as people.

In an attempt to discover whether or not various social stresses and demographic factors make failure-to-thrive more likely, information was sought in order to describe demographic and family characteristics of the systems in which such children appear.

Although social scientists, notably, sociologists and social workers, have contributed to our understanding of the mal-treatment of children, there is a paucity of objective (as opposed to impressionistic) descriptions of the personalities of mal-treating parents. This study set out to correct this omission.

THE COHORT

The mean age of the children on admission to the study was 27.5 months, their ages ranging from three months to six years. Interestingly this age (between two and three), is regarded as a notoriously difficult phase in a child's development - the so called 'terrible twos'. At this time
the child begins to develop his own identity and personality. His behaviour is often oppositional, explosive, irritable, stubborn and unpredictable. The management of 'normal' children at this stage of life is often problematic even for the most resourceful parents. So, apart from any difficulties of feeding and eating which may (as we have seen) have been going on from birth, the admission to the study of a substantial number of cases, at an age when 'run-of-the-mill' children are reported to be at a developmentally difficult stage, widened the scope, and possibly the range, of problems to be dealt with.

At that time (of referral to me) most of the children had had one or more admissions to hospital for the failure-to-thrive (on average two; range from 1-4). The average number of days spent in the hospital was 32-42.

All the children presented with serious growth retardation. Their weight was well below expected standards. Eighty-eight percent were below the third percentile and in the case of the two oldest children (twelve percent) they were just above the third percentile. The majority of them were also below the expected norms for height, sixty-five percent were below the third percentile and twenty-nine percent below the tenth percentile.

The appearance of these children was striking. They looked starved, extremely thin - often with an enlarged stomach, and thin arms and legs. Their hands were often pinkish-blue and wet. Their hair tended to be very thin, sometimes
falling out. One child aged two years seven months, had hardly any hair at all. Their faces tended to be pale with deep dark shadows around the eyes. Their facial expressions were equally of concern. All of them without exception, were withdrawn, lethargic in movements, apathetic, depressed-looking detached and irritable. They frequently burst into tears when spoken to, or when asked to do something. They were reluctant to speak or vocalise or to respond to requests or to stimulation. There was an air of disinterest about them and a reluctance to join in any activities. They looked extremely sad; most seldom smiled.

Developmentally (excluding those who were too young to assess) a large proportion of these children were retarded in all areas, especially in motor (forty-three percent) and language development (fifty-eight percent) but also in social behaviour (seventy-seven percent).
There were also noticeable delays in bowel and bladder control, but these were not analysed. The differences between the failure-to-thrive children and both control group children were highly significant on motor, language and social development. It was somewhat surprising, that the organically ill children (first control group) - where one might expect developmental slowness or deficits - were slightly more advanced than the index group. The largest discrepancy was between the index group and the non-feeding-disordered control group. Such developmental lags accord with the findings in the literature on maternal deprivation and resulting depression in infants. It makes very pertinent the investigation of parental attitudes.

COMPETENCE AND MATERNAL BACKGROUND

The capacity of mothers of failure-to-thrive children to provide their infants with adequate intellectual and emotional stimulation or even perceive them as separate individuals has been questioned (Patton & Gardner, 1962). In the present study, in this category of mothers, many expressed negative feelings about their own disadvantaged childhood and expressed a desire to be different and good mothers; however, they tended to have little knowledge of what that meant in a practical way, e.g. what food is beneficial and nutritional, the need for regularity and variety of food given, the need to play with the child
and provide stimulation etc. Such generational repetition has echoes in the concept of 'cycles of disadvantage' (see Rutter and Madge, 1976). It must be remembered, however, that some of the 'normal' control group mothers had also experienced severely disadvantaged upbringings and yet their children did not fail to thrive. And at a wider level - society in general - many women have poor models of parenting, yet become wholly satisfactory parents. It is certainly a disadvantage not to learn or experience good mothering but it does not provide a sufficiently precise or focused explanation of a highly specific problem - failure-to-thrive. Thus it is salutary to remember that there are many socially disadvantaged families at large in the community (that is to say in our affluent Western society) whose children are not mal-nourished or mal-treated. As we know from the child abuse literature, social disadvantage (no more than any other single factor) is not a sufficient or necessary cause of the problem; nor is it helpful to be formulated as a cause in such global terms. Doubtless (given the weight of agreement in the literature, and indeed the data in this study) maternal background mediated by many and varied 'causal' mechanisms, contributes to the failure-to-thrive syndrome. But there are surely other moderating variables which prevent or facilitate the particular manifestation of this failure in particular individuals and families.

MATERNAL ATTITUDES AND RELATIONSHIPS

It has been claimed in the literature that the lack of
maternal attachment or inadequate attachment is responsible for a variety of conditions such as defective weight gain and growth retardation in infants. The precise meaning of 'attachment' is problematic (Herbert et al, 1982) but in this study the mother-child interactions and relationships (leaving aside feeding related activities) had been for some time, distorted and problematic — in fifty-nine percent of cases. This distortion ranged from passive neglect (eighteen percent) to a more acute manifestation of emotional detachment and rejection (forty-one percent). Pollitt et al (1975) have described the maternal behaviour of their mothers as 'inoperant' because they have been observed in numerous situations to behave less effectively than mothers of thriving children. Two of the index children were battered and subsequently committed into care. Ten were on the 'At Risk' register.

A Care Order was obtained on one child for non-accidental injury after two years of various kinds of unsuccessful intervention. Although the child began to grow and his seriously retarded development had reached required norms while receiving treatment at home, the relationship and aversive interactions between mother and child had not been resolved satisfactorily.

A 'Place of Safety' Order was obtained on one infant (three months old) whilst in hospital; subsequently a full Care Order was obtained due to serious non-accidental injury inflicted by the father (nine broken ribs). Although I had no contact with the child and family prior to
hospitalisation, the child was included in the study in order to observe the behavioural pattern and management of the child in a foster home. It is of interest - and this reflects the findings in the literature - that the child grew well and thrived in the foster home. Although I worked with the foster mother it would be inappropriate to claim the child among the 'success group' - in the sense that I had aimed to produce weight gain in the natural home.

Whatever the state of the 'basic' maternal attachment to the child, it can be stated that ambivalence was the keynote of the feelings of most of the mothers to their malnourished children. There were those who expressed outright indifference or hostility. The question that struck me was: How do you feel towards a child who appears to reject love as denoted by your ministrations?

Sixty-two percent of the mothers felt that the child rejected them, because they rejected that most primary symbol of mother care - food. (The additional non-cuddly resistant, discontented temperaments of some children did not help!). We turn to a consideration of theoretical postulates about 'bonding' and its disruption shortly.

There was another aspect which possibly led to the disturbance of the mother-child interactions and relationships. The child's poor physical appearance and apathetic behaviour, brought about a lot of criticism from the family, neighbours, family doctors, health visitors, all of it adding up to a suggestion of poor mothering. This in turn hurt the mothers, made them feel guilty and angry.
They felt that they did not deserve this kind of treatment. Also frequent friction and quarrels between the parents were "caused" by the child and his problems. Very often they blamed the child for the aggravation and the misery that they suffered - scape-goating which required no subtle rationalisation, given the dramatic and disturbing quality of the child's symptoms.

Medical reports from the hospital and endless visits to the family doctor confirming that there was no medical reason for the child's poor growth and poor intake of food did not help. The mothers (in particular) were usually left in no doubt that the child's malaise was their fault and due to their mismanagement or neglect. The impact of all this blame (especially on those mothers who loved their offspring and who were doing their level best) can well be imagined. Even, in the case of wilfully neglectful mothers, blame and hostility from authoritative figures were not likely to benefit the child and indeed proved counterproductive.

It was an important element in the 'dynamics' of most of the behavioural casework interventions, that feelings of guilt, resentment, failure and helplessness have to be 'worked through' (by discussion and cognitive restructuring).

The mothers had often been threatened with the child being taken away from them i.e. 'put in care' if he did not improve. Those mothers who had successfully raised one or
more children before, found this particularly galling. Eight of the seventeen mothers reported that the failure-to-thrive child had ruined, or was in the process of destroying their lives. They were among the ones who described the malnourished child as unrewarding to rear and as rejecting.

We have seen that living conditions were far from ideal, exacerbated by financial problems in some cases. They felt under continual pressure from various directions and were not usually being offered (in their perception) constructive and practical help. Removal to hospital where the child generally gained weight was (in their eyes) a further indictment. They became increasingly anxious, helpless, depressed, angry and irritable. Three mothers were sufficiently depressed to require some psychiatric treatment; six were on tranquillisers; two being unable to cope with the family and outside pressure left home for a few days.

As part of my social work intervention and because of the worrying nature, not to mention the break-down of so many of the mother-child relationships, ten children were put on the 'At Risk' register and were placed at the day nursery as a protective measure. Here is a source of contradiction between care and control in my role which undermines the stated (and hoped for) philosophy of 'genuine participatory work' with parents in behavioural casework. I was torn two ways in my concern for the safety of the child and the dignity and integrity of the mothers as responsible care
givers to their offspring. The day care allowed daily monitoring of the child, a break for mother, and it provided much needed stimulation for the child so as to mitigate somewhat his/her development delays.

What we have so far is the kind of disturbance of the mother-child relationship described in the literature by researchers like Patton and Gardner (1962). Of course it is debatable whether it is cause or effect of the children's failure-to-thrive. It is also significant that as many as forty-one percent of mothers enjoyed reasonable or generally good relationships. Their interactions although generally good in most areas were difficult and anxiety-provoking during feeding related activities. One of these children had previously a history of organically caused feeding problems and although the physical difficulty was resolved by surgery (hence her presence in the index group), the child continued her problem long after that event and had arrived at a point of complete food (or feeding) aversion. This child was tube fed to keep her alive and spent a total of 230 days in hospital. (My intervention took place on the ward initially and continued into the home—see Case study). There was a second example of a child whose early failure-to-thrive was of organic origin (pyloric stenosis) which continued after the physical problem was resolved, presumably because of a psychogenic overlay. It was these secondary but now 'causal' sets of factors which were treated by the author.

AVOIDANCE LEARNING
problems and growth deficits continue after the remediation of an illness which makes feeding painful, or in some other way distressing, suggests one hypothesis: that there is a learned food avoidance, which evolves out of an association of eating with pain and discomfort (prior to surgery) and which continues when feeding is no longer painful but still anxiety-provoking. There may also be affective components (if not avoidance behaviour) such as fear, disgust, anger, etc. which are inimical to the beneficial effects of food actually ingested.

Sadly the feeding situations are only too often mismanaged. There may be unrealistic expectations on the part of parents that the child’s eating behaviour will change soon, if not immediately, after the operation. The possibility that the child has learned to fear broad aspects of the feeding process are overlooked. Extra stress and fear are imparted to the child. Mothers in my sample (there were two in the post-organic category) were inclined to push food at them and demand normal appetite and normal instrumental (feeding) behaviour. Of course they assumed that there was no longer any reason for him to resist and reject food. The battles often produced frustration and anger on both sides.
These parents were not told what to expect, or instructed how to feed the recovering child once he was discharged from the hospital. Such instructions and explanations could, if provided sensitively change parents' perceptions powerfully. Parents, of course are sometimes told things which they forget. Follow-up visits by health visitors or social workers might be helpful in preventing complications.

This usefulness of careful instruction was demonstrated by the organic failure-to-thrive parents in the contrast group. They were told that because of the child's continuing illness he would neither grow well nor feed well. Once they had accepted the problem, their feeding style in a majority of cases was coaxing, encouraging and patient. They did not attribute so readily, the child's resistance or reluctance to feed, to willfulness (i.e. oppositional behaviour) but simply as something they had to live with and manage according to the child's reaction at each feeding time.

This issue of attribution was another important theme in the behavioural casework intervention - using cognitive restructuring (new perceptions), explanations, explorations - to free the mother from self-defeating strategies.
At this stage it is possible to offer some conclusions ranging from the firm to the tentative:

Taking into consideration all the findings concerning this particular sample of failure-to-thrive children and their families (and hopefully they are representative coming as they do from a wide medical catchment area) it would seem fairly certain that failure-to-thrive is multifactoral in aetiology. We have seen one type of aetiological sequence where it is quite likely that we have a conditioned food aversion brought about by a mixture of early organic and later superimposed psychogenic factors (e.g. mismanagement). This kind of problem responds to (inter alia) systematic desensitisation.

Most of the case studies however present as the result of a complex interaction of somatic, social and psychological factors, the precise or confident unravelling of which (ex post facto) is not always possible. When things do go wrong (say, the refusal to eat) and whatever the reasons, there tends to be a lack of support systems to help the parents through the crisis - the kinds of friends, relatives etc., who help most run-of-the-mill mothers to overcome their occasional difficulties. Not even the mothers' partners (given marital difficulties) are as supportive as they could be - in several instances.

Granted, the difficulties parents face may be beyond ordinary help to be found in a supportive community.
By analysing and comparing various characteristics in the child's history beginning at birth (and seeking factors which might have contributed to the failure-to-thrive) it was revealed that the most striking difference between the index group and the two control groups, concern the initial eating/feeding behaviours of the infants. While this sounds like a statement of the obvious, doctors frequently neglect the processes and interactions involved in feeding when looking for organic causes of failure-to-thrive. These difficulties may not always resolve themselves on the basis of well-meaning commonsense advice, although practical help (e.g. giving the mother a 'break') may mitigate more serious developments.

Another major difference between the groups is the quantity and quality of mother/child interactions. Here it is difficult to separate cause and effect, the old chicken and egg (which comes first?) question, e.g. did the feeding difficulties affect mother/child interactions and relationships or did the negative mother/child relationships affect the feeding and subsequently the youngsters growth and development?

Certainly the often asserted association (at a correlational level) between retarded growth and environmental factors (and particularly maternal deprivation) is confirmed by this investigation.

As in the literature, the mechanism of the growth failure remains unclear at the conclusion of this investigation.
We have seen it suggested (Fischoff et al; 1971) that maternally deprived infants can be underweight because of under-eating (which is secondary to being offered inadequate food) or because of the refusal of the adequate food offered. Both of these categories are found in this study; but only two children were being given an inadequate diet, as far as could be ascertained. Education and careful monitoring were required (inter alia) in these cases.

In any event we have taken into account the fact that forty-one percent of cases did not involve any suspicion of maternal deprivation.

The problem failure-to-thrive begs the question "Why do some children though emotionally deprived, physically neglected, or both, grow reasonably well"? And the further one: "Why do some who are not neglected, fail to thrive".
Let us look at the feeding problems which occur in those who do develop the syndrome. All parents in the index group reported specific feeding difficulties in their children. Feeding time appeared to be a period of heightened stress for mothers. The history of seventeen failure-to-thrive children in this sample showed a remarkably similar history of feeding problems; an inability, reluctance or refusal to suck (taking up to two hours to take 2-3 ounces of milk) falling asleep every minute or so, crying while being fed, vomiting, stretching out and having diarrhoea. This pattern of behaviour was consistent in all cases while they were on liquids. Although most mothers found it very tiring and extremely irritating, the majority (fifteen) describe the onset of acute feeding difficulties as dating from the time when solids were introduced. All the children studied, persistently refused to take solids; vomiting and diarrhoea increased; screaming whilst being fed was persistent in duration and intensity. Regurgitation and heaving occurred with all the children at each feeding time; they showed a tendency to store food in the mouth, and an inability to swallow and chew. Even small pieces of vegetables, bread and meat caused heaving and vomiting.

One would expect more feeding difficulties with failure-to-thrive children as compared with controls; but the magnitude of the difference is striking not only when compared with the 'normal' control group, but with control group one, where one would expect a lot of eating problems
Among the fifteen identified kinds of feeding problems, an average manifestation of the difficulties per child in the index group was 9.9, but surprisingly only 3.3 in the first control group (ill children) and as little as 1.2 in the 'normal' population of children (second control group). Given the interesting finding that the feeding problem had its onset from birth, we are still left without an answer to our question. Furthermore, the severity of the feeding difficulties increased as time went on, exacerbated by weaning onto solids.

PERINATAL EVENTS

Looking for early, potential determinants is not particularly helpful. A report of more stressful and unwanted pregnancies is inconclusive. There are those who believe that for bonding to occur there must be skin-to-skin contact immediately after birth; there is concern over prematurity or over the effects of a caesarian birth on the mother-child relationship. However, a majority of the children in the index group were born at term (eighty-two percent) following a normal delivery (ninety-four percent). The duration of labour was somewhat short on average (eighty-eight percent). But in these aspects they did not differ significantly from either of the control groups.

Herbert, Sluckin and Sluckin (1982) have examined the
serious question as to what extent maternal attachment may be affected by peculiar circumstances of the post-natal care of the babies. Such babies, after all, are fairly common. Low birth weight and pre-term infants are typically placed in a special care nursery. This increases the chances that the mother and infant do not have much opportunity to interact in the early days following birth.

How does this affect the mothers feelings towards their babies, both in the short term and the longer term? Disquiet about separation has been voiced by some (often middle-class) parents and by many professionals such as pediatricians, midwives, medical social workers, and psychologists. Whatever the truth of the matter (and the authors are sceptical in the light of the evidence) the findings of the present study reveal that the index group was the most advantaged group as far as perinatal factors are concerned, in comparison with the two control groups.

Only one child was in a special care baby unit compared with seven from the first and three from the second control group. They had no other histories of early post-natal separation. Their birth-weight, on average, was 6lbs 9ounces (which is slightly below the national average weight of 7lbs). They were only 3 ounces heavier on average, than the first control group and almost one pound lighter than the second control group. The present investigation does not support the findings of Field et al (1980) who found significant differences in low birthweight and early births among failure-to-thrive children when
compared with controls. However, as with the findings of Pollitt et al. (1978), there was evidence (admittedly all of it retrospective) that there were marked differences in the ways mothers in the samples, and their newborns, behaved during the first feeding interaction. I was not in a position to relate them to birthweight and growth velocity as did the above researchers.

**Bonding Theory**

Cultural conditions are probably important in determining maternal bonds, as are relatively smooth mutual learning processes as between mother and child. Early post-partum contact has also been emphasised in the literature. Certainly, failures or distortions of bonding are commonly inculpated in the literature on the aetiology of child maltreatment. Herbert et al (1982) are very critical of this concept when used as an explanatory principle - at least when it is applied in a simple-minded manner. The authors state 'that the issues raised by the bonding doctrine are not solely academic. The impact of the doctrine upon the thinking of practitioners in obstetrics and paediatric fields has been considerable. It has markedly influenced the procedures adopted by nurses and especially by midwives and health visitors, and the types of advice they give to their patients and clients. The doctrine has also impressed itself in the field of social work, particularly in relation to child abuse, but also throughout the whole area of child welfare.'
I tested the bonding hypothesis. Certainly, the mothers' feelings for the child at the time of admission into the study—in seven cases—were indifferent or rejective. The mothers reported that their sense of the child belonging to them was weak in twenty-four percent of cases and moderate in eight percent. However, sixty-eight percent reported feeling strong ties with the child whatever their actual behaviour might be thought to indicate. They certainly differed substantially from the control groups on affection (self-report) and five other indices of 'bonding'. The trouble with the concept of bonding is the low intercorrelation between so called measures of bonding. It is difficult to know what precisely it means. Certainly it cannot be said from the present data that 'bonding' (if maternal reports are to be accepted) is a sufficient or necessary cause of failure-to-thrive. There is nothing that special about the index group's early experience.

In any event, the findings in several investigations fail to support the theory that 'bonding' takes place immediately after birth; mother to child attachment is determined by many variables other than the particular factors regarded as significant by proponents of a sensitive period type of bonding hypothesis, such as seeing the child immediately after delivery, touching it, having skin-to-skin contact and not being separated from him. In the present study, fifteen index mothers did see their child and were allowed contact with him/her after birth. Only one child went to a special care baby unit. In this
respect, as I mentioned before (in comparison with both control groups) they were the most advantaged group.

There were no significant differences between the groups in the way the mothers felt about the child after delivery.

Yet, both control group mothers are 'bonded' to their children significantly more (p<0.01) than the index group — in the traditional sense of feeling strong, enduring affectional ties. Why should this be?

Learning, in the view of this author, is a key to understanding problems of bonding; and the learning may not involve only direct learning processes or mechanisms (see below) but vicarious observational learning (e.g. imitation) such as occurs when children learn social and sex roles from their parents. In this area the index mothers had had impoverished experiences - poor models of parenting - in more instances than the control parents.

Sluckin, Herbert and Sluckin (in press) discuss this and other aspects of bonding in a chapter (in their book Maternal Bonding) on the development of parental attachments. They point out that mother-love is indiscriminate, and in human mothers often absent, at the outset. Specific love tends to develop slowly but surely. The bond to the child gradually grows stronger and stronger. Doubtless there is a genetic bias toward maternal behaviour and feelings in humans; classical and operant conditioning also play a significant part. The mother's mere exposure (familiarity breeds liking) to her baby makes a contribution towards the development of a bond
to the baby. In terms of classical conditioning, the appearance of young infants and the sounds they make etc. are unconditioned stimuli which evoke mothering behaviour. Operant conditioning may also play a part. Everything that the mother does for the child which benefits it is ipso facto reinforcing for the mother and her maternal feelings.

At all levels of learning we can see things going wrong for the failure-to-thrive child and his mother. The children are relatively less rewarding to look after; parent and child become distanced from each other. Different forms of learning have few opportunities to operate; in any event aversive stimuli connected with feeding and other nurturant activities tend to predominate. Hence, mothers show, in many cases, less maternal attachment. Perhaps this can be viewed as a result (in some instances) rather than a cause of the failure-to-thrive and other conditions. The findings of this study seem to suggest that the contention of Svejda et al (1981) and Jones et al. (1980), that difficulties of bonding (so-called) have less to do with post-partum skin-to-skin contact and more to do with difficult interactions arising from lack of positive response from the child, lack of support and help, depression and tiredness. All these factors can inhibit the growth of fondness and love. Instead, parenthood might be seen and acutely felt, as a burden, and as a very unrewarding experience.

It has been suggested by Sluckin et al (in press) that bonding is the bed-rock in the formation of the mother's
attitudes towards and relationship with, her child; it provides us with a particularly potent metaphor to explain both significant phenomena (such as mother love) and certain distressing facts (like maternal cruelty). They state that the trouble with metaphors, no matter how illuminating, is their tendency to inhibit precise analysis.

Because of both its complexity, and the lack of supportive evidence, the syndrome of failure-to-thrive cannot simply be ascribed to an unspecified 'bonding failure' (as it is sometimes 'explained away' at Case Conferences); nor is it simply associated with relationship difficulties stemming from events occurring within a short period, after birth. Indeed, if one did attribute failure-to-thrive to bonding per se, one might jeopardise treatment; 'bonding failure' carries nihilistic or pessimistic therapeutic implications. In the present study a broadly conceived psycho-social therapeutic programme, which set out modest, specific (but optimistic) objectives, mainly behavioural in orientation, achieved an encouraging success rate. The approach was based on the premise that some children and mothers (for various reasons, still only dimly understood) have an aversive effect on each other and instead of growing closer together as time goes on, they grow apart. Growing apart can mean emotional indifference, rejection, neglect and even in some cases physical abuse. Again for reasons which are obscure, and probably various, feeding becomes the battleground or area of particular neglect, in failure-to-thrive. We now examine the aversive factors highlighted by this study.
Feeding became the focus, or provided the focus, for much of the unpleasantness in the relationship between index mothers and their offspring. Nothing special emerged about attitudes to early feeding. Only two index children were breast fed. Thirteen mothers preferred bottle feeding. This bias toward bottle feeding was more evident in index mothers, but they did not differ significantly from the control group mothers. It is difficult to draw any conclusions, regarding preferences for bottle feeding, because of the general tendency and attitudes nationwide to breast feeding. It also is dependent on hospital staff convictions or preferences at a particular time. None of the mothers stated that they resented breast feeding.

All of the index group had feeding difficulties from the very beginning – in two cases with an identifiable physical cause. However the subsequent history of the seventeen children in the sample showed different patterns of generalisation of their feeding disorder.

Determined 'hunger strikes' were observed in eight children aged from eight months to three and a half years. The periods of complete refusal to take solids and liquids ranged from ten to twelve days; Refusal to take food at all from anybody was found in three cases; refusal to take food from mother only was found in five cases. The children in this category accepted some feeds from the
father, neighbour, health visitor, in fact from anybody but the mother. All degrees of reluctance, between the extremes of complete refusal and occasional problems over actual eating, were found.

One of the clients had to be tube fed for two and a half months in hospital, after her persistent and complete rejection of food at home and indeed (more unusually) in hospital. Although the child put on weight while being tube fed and showed improved motor, language and social development her ability to take ordinary food and the actual eating, diminished. She would play with food, looking at it, putting it in her hair, on her face, pushing the dish from the table, pushing her hands into the dish and washing her hands with it. When anyone tried to feed her she would not open her mouth, and if she did she would keep the food in her mouth, apparently not knowing what to do with it. She certainly would not swallow. When persistent efforts were made to feed her she would spit and become very aggressive, screaming and hitting the nurse who tried to feed her, or knocking the objects around her.

One possibility occurred to us, looking at her history: that due to a hiatus hernia which she had suffered with since birth, the pain associated with eating, and an accompanying high level of tension in the mother who had tried all sorts of ways to make her eat, there was now in existence a phobic avoidance of eating. It seems likely to put it theoretically - that the child had learned (on a classical cum operant basis) to avoid food by associating
it with physical pain and discomfort because of the hernia; and she was now associating feeding with painful and unpleasant events like the mother’s anxiety and the fact of being force fed. The mother would be crying while trying to feed her, or shouting at her. This went on for a considerable period prior to the child’s operation, and although she was operated on successfully and the pain apparently terminated, the feeding problem was not resolved. Reducing the amount of food given the child did not stimulate her appetite, nor did she seek more food. It was difficult for the paediatricians and dieticians to work out the required caloric intake so that the child would not lose weight, and at the same time start taking food by mouth. The attempts to train her to eat again by the gradual reduction in the amount of tube-feeding, failed to resolve the problem. It was decided to risk the discontinuation of tube-feeding and to put her on a behavioural programme designed to encourage normal eating. This was supervised by the author. After six weeks of hard work on the ward she began to eat. The programme was subsequently extended and generalised in order to take in the home setting.
Antecedents

The proximal events (see Fig.1) prior to complete refusal to take food could not be specified in every case. During the author’s investigation—by this time well on into the evolution of the problem—the mother would notify the researcher promptly of particular eating crises. This allowed her to go through the behavioural problems and events leading up to particular episodes of feeding difficulties. The situations most commonly recorded were: unusual stresses, extra worries, irritability, general atmosphere at home, tiredness, depression, anxiety caused by financial difficulties and marital clashes.

It was established that the 'feeder' rather than the 'fed' instigated (at least in part) many of the problems. The prevailing mood was important; the mother generally felt particularly angry, irritable and tired; her threshold of tolerance to the child’s awkwardness with food was affected by quarrels between herself and her partner in some cases—usually over the handling of the child. Another common area of sensitivity was brought about by the father’s or relatives’ criticism which reflected on the mothers adequacy. Seven mothers reported pre-menstrual tension which influenced their behaviour.
In two cases in the sample, failure-to-thrive was caused apparently by sheer under-feeding and inappropriate feeding. Essentially the children were being starved; both children were seriously under nourished and under stimulated.

**FEEDING STYLE**

The findings suggest a strong component of anger and rejection in the feeding style of the mothers of failure-to-thrive children. Such brusque, not to say, rough feeding patterns - whether cause or effect of the child's feeding difficulties - do not facilitate such a delicate psycho-somatic activity as eating and digesting. The majority of mothers reported variations ranging from brusqueness to shouting, biting and shaking the child while it was being fed. Some had resorted to force-feeding; eight mothers had left the child in the bedroom for long periods as a punishment, but also, interestingly, in order to avoid 'battering' the child.

All mothers reported trying various methods of feeding and places of feeding (e.g. different ways of holding or feeding in the pram, changing the brands of milk) but with little or no success at all. Six mothers reported better intake of food when the children were fed in the pram or cot. This might suggest that holding the child was uncomfortable for him or that he felt safer or less anxious while being in the cot. (Temperamentally difficult children tend to
dislike being held). Because these children were not putting on weight, or indeed even losing weight, fourteen mothers (in a state of despair) resorted at one time or another to force-feeding the child, trying to push food in to his/her mouth. The child's reaction to this feeding style was one of resistance and fear. The mother's reaction to the resistance was (in turn) one of anger, helpless despair or both. Some reported screaming, shouting, shaking or even hitting the child, even at times bursting into tears. I observed in some cases that the anxiety of the child would rise at the sight of food. When attempts to feed were persisted in, the child would become panicky, screaming, vomiting and sometimes have diarrhoea.

The fear, as time went on, appeared to have generalised itself to the mother's person (five cases, twenty-nine percent) and to everybody who tried to feed (three cases, eighteen percent). In the most severe cases children screamed at the sight of the mother and stopped taking feeds from her altogether. When mother came near the child to try to touch him he would cry and scream.

Such a breakdown in mother-child interactions had serious developmental implications. These children were sometimes left alone, away from everybody, unstimulated.

It is not surprising, being reared in relative social isolation, that they showed marked developmental delays—particularly in the realms of language and social behaviour.
Most mothers feared that the child would die of starvation. Four of the mothers brought their child to casualty during the evening, because of vomiting, diarrhoea, screaming and refusal to eat. Three mothers became hysterical in the General Practitioner’s surgery as they felt they were being perceived as neurotic nuisances or uncaring people. Four mothers described going at night to the child’s bedroom to see whether he was still alive. Twelve experienced acute anxiety symptoms including physical pain in the chest, stomach and throat, during the feeding battles. They reported a kind of chronic pre-occupation: watching the child wasting away and feeling that their whole lives were concentrated on the child and his poor growth.

MATERNAL PERSONALITY

In the search for specificity in the causes of failure-to-thrive, the mother’s personality structure was investigated. Two tests were used viz, 16PF and E.P.I. Maternal personality was measured by 16P.F. A first and second order analysis did not reveal any significant differences between the studied groups. The mothers present an average personality profile on all but one dimension, intelligence, which was a little above average. Certainly, there is no hint of the ‘character disorder’ suggested by some theorists. No statistically significant differences were found between the groups on Neuroticism and Extraversion as measured by the E.P.I.
The data from these investigations does not support the likelihood of personality pathology, producing - in turn- maternal behaviour which could affect the child's growth and development. There was some personal vulnerability found in the mother's predisposition to anxiety and actual anxiety reaction to stress. Although the mothers of the index group did not differ significantly from either of the control groups, they obtained higher scores on both state and trait anxiety.

The mean trait scores (45) of these mothers are higher than the average obtained by a standardisation sample of 'normals'. These findings suggest that they are more anxious generally in a wide variety of life situations.

The average score on the state anxiety (47) was also higher than both control groups, which would explain why they react to stress more quickly and acutely. In other words the index group mothers are high on items revealing transitory emotional states or situations characterised by subjective, consciously perceived feelings of tension and apprehension.

Being predisposed by nature to anxiety and having to cope with (as we shall see) an initially difficult child (in many cases) who resists such primary care as food intake, a chain of aversive interactions seemed to be set in motion. The fact that the child's physical appearance and growth was causing a lot of concern, which in turn reflected on
the poor quality of mothering, did not help to facilitate interactions which should be calm and rewarding for the mother and child.

The pressures coming from all directions and the words of criticism, made the mothers more anxious, helpless and angry. The way she fed and generally related to the child was also anxiety-provoking for him or her. The more pressures that were put on the mother the more anxious she felt and the more (wittingly and/or unwittingly) she pressurised the child.

Certainly the behaviour of these women may be described as "skill deficit" behaviours, because it differs quite substantially in many cases in quantity and quality from that of the mothers of both control groups. The mothers of failure-to-thrive children relate less often to their children, are less affectionate and more prone to use physical punishment. These behaviours, which may interfere with the synchrony of the relationship with the child can, according to the literature (e.g. Herbert 1980) be triggered by the child's idiosyncratic behavioural characteristics and aspects of the mother's own previous experience.

MATERNAL EXPERIENCE

Several researchers (e.g. Kempe and Kempe, 1978) have investigated the effects of a mother's own childhood experiences and her subsequent maternal attitudes, relating
poor parental models, rejection and the like to an inability to assume a loving maternal role. Kempe and Kempe (ibid) report that the most consistent features of the histories of abusive families is the repetition, from one generation to the next, of a pattern of abuse, neglect and parent loss or deprivation. It is not possible to predict what will happen in particular cases and the 'mechanisms' are shrouded in mystery, but it seems critical to have been sympathetically parented and to have experienced 'what it feels like, to be an infant helpless but cherished and nurtured into childhood'. Many of the index mothers did not enjoy such experiences.

Most mothers (seventy-one percent) had somewhat distressing pregnancies, due to physical complications, lack of support, marital friction and financial difficulties. Thirty-five percent of the pregnancies were not planned and wanted. The marital relationships of these couples were full of friction, disagreements and quarrels. Living conditions were inadequate or marginal in ten cases and there were financial difficulties in nine cases. These are not the conditions to facilitate affectionate bonds between mother and child, or to make the difficult 'patches' in relationships, self-limiting. However, it was of interest that there were no excess of complications at birth in the index cases.

Apart from the stresses at home, these mothers have had little support and help from the extended family, friends and neighbours. They were in a much worse position than both the control groups regarding the possibilities of
asking a friend or neighbour for help, support, advice and assistance.

Only eighteen percent of the mothers received substantial help and understanding from the neighbours and friends and thirty-five percent occasionally. This social isolation (reported elsewhere in the literature) when they were in difficulties, brought about feelings of helplessness and hopelessness, frustration and anger. Such experiences simply repeated their own experiences as children when they were often unsupported in terms of loving nurturance. Not surprisingly, as many as fifty-seven percent of the index group families did not receive any help from their extended families; and in only eighteen percent were their families available occasionally. This unavailability is related to two factors (a) poor and broken down relationships with the home of origin (thirty-five percent); and (b) the nuclear families living far away (twenty-four percent) from their roots.

The first control group mothers were in the same 'impoverished' position regarding extended family support systems, but at least they enjoyed more contact with friends and substantially more support from their husbands.

There was also reluctance and apprehension to approach people for help, because of the sensitive nature of the problem. A starved and lethargic child reflects on the mother's care, and concern expressed by the people around, regarding his appearance was obviously not sympathetic to
the mothers. For that very reason, some avoided contact even with friends with whom they enjoyed friendship previously.

The plea for help with the feeding from the family doctor or the health visitor was not always responded to seriously until the child was in a bad state. As many as thirteen families reported lack of understanding of the difficulties they experienced with the child.

A possibility that had to be looked into, was that the lack of interaction and abnormal relatedness (described above) may be due as much to a temperamental mis-match between mother and child as to some deficits in the mother arising from (say) a stressful and deprived childhood, or an anxious personality makeup. Given vulnerable parents, and children who from birth are difficult to rear, the stage could well be set for unrewarding, and indeed, aversive parent child interaction. The vulnerable parental factors have not been neglected in the child abuse literature. However, the child (victim) has received rather scant attention in his own right. Effective prevention is more likely if we can identify those children who are most at risk of parental mismanagement. It would suggest that while looking at the social histories, family financing, parental attitudes, history of pregnancy and birth, marital status, and so on - all of which are extremely important and helpful in understanding the problem - we should also look at the child and the two-way interactions between parent and child, and child and mother. This was a serious
concern in the present study and led to potentially significant findings.

TEMPERAMENT OF THE CHILD

Whatever a mother does in relation to her baby affects it, and the infants' behaviour thus influenced, in turn affects the mother's next action, and so on. These interactions are highly complex and idiosyncratic. Thus the course of development of maternal bonding in each individual case is quite unique even though the same general 'laws' of learning operate in all cases (Sluckin et al. in press).

Thomas et al. (1968) demonstrated that certain children with so-called 'difficult temperaments' (which are evident soon after birth) produced problems for parents such that they were unable (or found it extremely exhausting) to cope with the child and his rearing. Such infants were resistant to child-rearing. In many of the fraught confrontational situations that arose, the parent-child interactions led to distressing and deviant outcomes. Seventy percent of the children classified as difficult developed serious behaviour problems.

As a reminder to the reader, Thomas et al. found three distinguishable clusters of temperamental characteristics which were grouped under the terms: 'difficult babies', 'easy babies' and 'slow-to-warm up'.
The difficult child showed irregularity in biological functioning, a predominance to negative-withdrawal responses to new stimuli; slowness in adapting to change in the environment, a high frequency of expression of negative moods and a predominance of intense reactions. The easy child on the other hand, was positive in mood, highly regular, low or mild in the intensity of his reactions, rapidly adaptable and usually positive in his approach to new situations. In short, his temperamental organisation was such that it usually made his early care very easy. He was rewarding to his mother and vice versa. The third temperamental type - the slow-to-warm up - combined negative responses of mild intensity to new stimuli with slow adaptability after repeated contact. An infant with such characteristics differs from the difficult child, in that he withdraws from anything new, quietly rather than loudly. In addition, he does not exhibit the intense reactions, frequent negative moods, and irregularity of biological functions of the difficult child. He is not an 'easy' child to rear but he is not a 'mother killer' as difficult children were so aptly named.
In the present study use was made of Carey's temperamental questionnaire, which is directly based on the Thomas et al. behavioural protocol. The tabulation below serves as a reminder of the temperamental patterns found from the three groups.

Table 14.1

<table>
<thead>
<tr>
<th></th>
<th>Index Group</th>
<th>Control Group 1</th>
<th>Control Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td>4</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Difficult</td>
<td>5</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Slow-to-warm up</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Intermediate falling into no one category</td>
<td>3</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

There are interesting differences between non-organic failure-to-thrive children and the two control groups. Many of the failure-to-thrive children can be said to have been heavily predisposed to difficulties; and their management, not surprisingly, was burdensome from early on in their lives. Only one difficult child (six percent) was found within the control groups and two (twelve percent) of the slow-to-warm up style of temperament; the parents of both control groups enjoyed their children more, but these children were also easy to enjoy. Mutually rewarding sequences were facilitated.

When we examine the feeding in the context of temperamental type and parental style and attitudes, then we begin to
understand why some of the interactional and relationship problems may have occurred.

Fifty-nine percent of the index group adapted slowly (by temperament) to any changes, so probably when solids were introduced they were not given enough time to get used to the new taste and texture of food. Instead, the food was pushed in with a high degree of impatience and anger. Again, the mothers reported changing various brands of milk. It could be argued that they had not tried long enough, in a manner which was encouraging to the child.

An active child during feeding makes the task more difficult, many of the children were 'squirmy': holding by mothers was too firm and restrictive. Such children dislike being held. They were unpredictable in their biological functioning, so the routine of sleeping, eating, etc. were difficult to establish. The mothers found them tiring and looking after them was time-consuming. They were difficult to enjoy because of their moodiness, irritability and high intensity reactions. Their crying was loud and prolonged and the parents reported their inability to 'jolly' them out of a bad mood, or to distract them. The mothers of these children would say things, the gist of which meant that 'when he gets into an awkward mood in the morning, he is like that all day'.

An analysis of the casework data reveals that the most intensive negative reactions to feeding and other child-care duties were shown by the temperamentally
difficult children (twenty-nine percent). It is of interest and importance to point out that it was the mothers of these children who manifested the most negative ways of interacting with their offspring in the sample. Their feeding style was particularly forceful, impatient and angry. The clashes between these mother-child pairs during feeding led to complete food refusal.

The mother’s feeding style of the slow-to-warm up children (twenty-nine percent) tended to be passive not very determined and not persistent; they were inclined to get discouraged and were often reduced to tears, unable to cope with the problem emotionally.

The mothers’ feeding styles in the case of the three easy children and two of those children falling into no particular clearcut category of temperamental characteristic, were (wittingly or unwittingly) neglectful. They seemed unaware or insensitive to their child’s physical or emotional needs. The mothers of these children came themselves from very deprived and neglectful homes. They basically lacked appropriate models of parenting and knowledge of child-care.

A determined but helpful and coaxing feeding style was observed in only two cases. One child was of easy temperament and one fell into no one category. The central problems lay outside the "mechanics" of feeding. It is not surprising that the key to the relationship between the mothers with more difficult children were avoidance,
fear and anger. They felt uncomfortable in each others company. Especially with 'difficult' and 'slow-to-warm up' children, there was created a platform for the appearance of various behavioural problems.

Among thirty-four listed behavioural problems those of acting out and the 'deficit kind' were prominent, and a dramatic difference was found between the index group children and both control groups. The average number of behaviour problems manifested by the index children was 5.9 per child, whilst there was only 1.8 in the first control group and 0.9 in the second control group.

Looking at the combination of various forms of feeding, and all aspects of the mother-child interactions, plus the child's temperamental characteristics, there is some evidence to suggest that the mismatch between a child's temperament and his mother's management produces clashes, which over time (if help is not provided in the early stages) leads to serious consequences.

The five children with a difficult temperament in this study gave evidence of:
(a) Angry and hostile interactions, especially at feeding/eating time.
(b) Complete refusal to take feeds from the mother with resulting starvation.
(c) A high risk of physical abuse of a serious nature (two out of the five children were battered).
(d) All of them were bruised.
(e) Two were committed to care.
(f) Four of them were on the 'At Risk' register.
(g) The mother-child relationship broke down in one case (the child was given up by the mother for adoption) and in others was seriously distorted.
(h) The children showed more behaviour problems (acting out).

It is important to point out that the hospital staff and the foster mothers found them difficult to manage, and rather unappealing. Not for nothing have such children been called 'mother killers' in the New York study.

The slow-to-warm up children were found to present serious weight and height problems and the most notable developmental retardation - most obvious in their language and social behaviour. They were also found to be the most emotionally deprived and isolated from family activities and interactions, especially from the mother and the siblings. The fathers in three cases were almost unavailable to them, in two cases very protective and caring.

The mothers' interaction with these children, apart from one case, tended to be passive, unstimulating and at times rejective. They were seldom included in the family or siblings activities. They were quietly detached, unresponsive to stimulation and they seemed to the mothers not interested in play, participation and sharing. Being undemanding they could be ignored somewhat. They seemed to
be most contented when left alone, and not pressurised to do anything. Learning various new social skills took much longer (like toilet training, eating, dressing, washing etc.) than the other types. Since interactions with the mother in a majority of cases was somewhat passive, not encouraging, and rather low on physical and verbal contact, they tended to create an atmosphere for themselves which was relatively unstimulating and depriving. Mothers reported getting little pleasure out of them.

The five children with a slow-to-warm up temperament gave evidence of:

(a) Being at some risk, three were on the 'At Risk' register.
(b) Four had to be placed at the day nursery for extra stimulation and as a 'break' from a poor mother-child relationship.
(c) Three were bruised.
(d) All of them manifested deficit behaviours (and to a lesser degree acting-out behaviour).

PATERNAL INFLUENCES

What of the father's role in the problem? The fathers of the failure-to-thrive children showed positive attitudes towards the child in seventy-five percent of the cases.

They did not differ significantly from the fathers of the control groups in the amount of physical help they provided
in the child's regular care, or their home backgrounds.

However, significant differences were found between the groups on father-child interactions. They played and talked less often with their offspring and seldom picked them up. The child's irresponsiveness, or frequent negative moods, prevented (as the father's reported) a closer and more enjoyable contact.

A majority of the father's expressed worries and concern regarding the deteriorating mother-child interactions and relationships. Being aware of the consequences if help was not provided or taken up, once provided, they usually encouraged and supported a social work intervention. They were torn (in several cases) emotionally, between mother and the child. Frequent complaints about the child from the mother brought about tension, friction and quarrels. The fathers as well as the mothers blamed the child for much of the trouble they had been experiencing.

It is an admitted weakness of this study that the paternal role was so superficially evaluated in a formal sense, although their paternal function was not ignored or devalued in the casework carried out.
SUMMARY

The findings of this study appear to confirm the evidence-based assertion of Pollitt et al. (1978) that food intake (and presumably nutrition) depends in part, upon environmental circumstances that can become influential from the beginning of postnatal life and contribute to the regulation and velocity of infant growth.

Conclusions about the causation of failure-to-thrive have to be tentative for several reasons:

(a) the sample is a relatively small one and may not be representative; generalisations from the data must be cautious ones.

(b) the reliability of measures used are intrinsically questionable- as are all psychological tests and measures - but an extra dimension of doubt is the timing of such testing, viz. when the families were immersed in crises. A mitigating factor which increases the credibility of my information is the intensive use of direct observations and painstaking recordings. This is not to say that observer bias does not creep in, hence the use of independent judges and criteria, wherever possible.

Bearing in mind these reservations, it is still possible to affirm with some confidence that failure-to-thrive appears to be multifactorial in its aetiology - involving
psychological, social and somatic elements in varying 'mixes' in different cases. It will be remembered that Pollitt et al. (1978) demonstrated a relationship between mother-child interaction and physical growth. This is confirmed in the present study.

The route to this worrying problem - which essentially centres on eating and absorption disorders - varies from one family to another. Patterns of contributory causes do emerge. Many of the child victims are difficult (not least in biological and psychological adaptability) from birth. Once again, we are able to confirm the Pollitt et al. (1976) finding about the role of temperament in feeding. Feeding (or its aftermath, absorption) is the major focus (as we observed) of the problem, probably because it requires calm co-operation between two people, and presumably, reasonable conditions for absorbing the nutritious benefit of the food.

However, the reasons for particular incidents of failure-to-thrive are not altogether clear, but they were organic in two instances. Conditioning mechanisms were probably important. Mothers were ill-equipped to cope with awkward situations in terms of their past experience and their present high level of anxiety and lack of support systems. A high degree of rejection and hostility exists - whether as cause or effect or both - remaining unclear. One can well imagine a situation in which the rejected child - whatever the cause of any original eating problems (and temperament plays its part in some cases) - feels
depressed, with a wholly predictable loss of appetite and consequent reluctance to eat.

Fortunately, behavioural work does not necessarily require the clearcut specification of causes, although knowledge of causes is an obvious advantage. Thus, in general terms, the behavioural and interactional disorders of these children (and their parents) were conceptualised as consequences of some (specified or unspecified) faulty learning and/or socialisation process (Herbert, 1981). The intervention, designed to remediate deficits or reduce 'excess' problems is based on social learning theory and involves training and re-training. In cases like failure-to-thrive this constitutes a relatively long-term endeavour (over one year on average). The goal of behavioural casework in the home setting was to change not only the target child but also parental (and particularly, maternal) behaviour (Herbert and Iwaniec, 1979). It focuses particularly on producing the face-to-face conditions in which 'bonding' can develop, or to make good 'damaged' relationships.

In the cases of failure-to-thrive, maternal responses and reactions to the child were modified with an encouragingly high degree of success. This is our cue to draw some conclusions about the intervention aspect (perhaps the most important facet) of this study.

TREATMENT

The treatment of failure-to-thrive cases (as we evolved a
routine with increasing experience) consisted of a
'package' which was a multi-element one of psychosocial
techniques and methods ranging from 'talking'
(counselling), social service provision, to behaviour
modification and didactic developmental advice. This
family-orientated approach combined behavioural methods of
assessment and modification with family casework methods
(which included discussion, clarification of problems,
task-setting and support-giving). It was carried out in the
home with both parents (generally speaking) and the child.

The package might include:

1. Resolving feeding difficulties and improving feeding
   style i.e. modifying maternal behaviour and responses
during the act of feeding.

2. Deliberately and in a planned fashion increasing
   positive interactions and decreasing negative
   interactions between mother and child, and, indeed,
   other members of the family - where relevant.
   Where necessary a need to desensitise the child's
   anxiety and fear with regard to the mother's feeding
   and other care-giving activities. On occasions there
   was a real need to desensitise the mother's tension,
   anger and resentment when in the child's
   company.

3. Intensifying (by careful planning and structuring)
   mother-child interactions, especially those likely
to be mutually rewarding.

4. Some older children with a long history of failure-to
thrive present behavioural problems. These are dealt with once the 'emotional arousal' in the family, but especially between mother and child is lowered and (hopefully) improves. It is unwise and also unproductive to deal with all presenting problems at the same time. Firstly, some irritating and worrying behaviours do resolve themselves once the child is emotionally "accepted" by the mother and when her responses to the child are more positive. Perhaps her tolerance threshold is heightened. Secondly, by including all problematic behaviours, therapy could well overburden an already tired, demoralised and depressed mother, who, by this time, has very little spare coping capacity.

During the assessment period attention was given to immediate needs. It was found advisable to arrange day or nursery care for the child. This care is probably not sufficient to explain all the beneficial changes which occurred, but this provision does perhaps contribute to the improvement. Only one child needed nursery care full-time, two attended full days twice a week; five went three times a week in the afternoons only; and two attended mornings only twice a week.

It seemed beneficial to discuss the assessment and the intervention plan with the mother (but certainly both parents) where there is a father present. It was recognised that the mother needs help in her own right, as well as the father.
INTERVENTION RESULTS

The results of this multi-element package were very encouraging. Because a multi-modal package was used it is not possible to tease out the specifically 'active' therapeutic ingredients. They may well differ (in any event) from one case to another. Graphical records of change certainly suggest this.

FOLLOW UPS

Maintenance is always the most difficult technical feat (i.e. temporal generalisation) in behavioural work. Parent groups and follow-up work were designed to aid the maintenance of improvements which had been obtained in therapy. The follow-ups were routinely carried out at six months and one year after the case was closed, but were 'on tap' as booster sessions, if required.

A six month follow up indicated an overall maintenance of progress achieved during the treatment, except for cases 9, 10 and 13.

Case 9 was marginal when treatment terminated. The general child-care deteriorated further due to the mother's difficult pregnancy. Sabrina was gaining little weight and looked lethargic.

Case 10, Ian B. was fostered out very soon after the termination of treatment and was subsequently adopted.
There were special events leading to a voluntary-child separation. Mrs B's boyfriend was arrested for stealing and she found it impossible to carry on bringing up the children without his help. She became depressed, tired, of life.
This case indicates that whilst personal support and help was provided by the man she loved, the quality of her life improved dramatically, and she responded to my intervention whole-heartedly. Once that was terminated she found it difficult to care and show affection to Ian. Being an illegitimate child she felt less commitment to him than to her other children. Ian, however, grew well and didn't show any signs of deterioration when he was fostered out.

Case 13. A deterioration (discovered during the write up of this thesis) in eating and general responsiveness in this case was diagnosed as due to the exacerbation of an organic condition not detected in the original medical diagnostic tests. The family moved to a different area, where it was discovered that he had severe stomach muscle problems. It is important to point out at this stage, that the child had four previous admissions to hospital, and was fully assessed at the Paediatric Assessment Centre. His handicap was not discovered. His failure-to-thrive was really of an organic origin*

Footnote*
The child was misclassified as non-organic failure-to-thrive, in good faith, because of an unfortunate medical mis-diagnosis. This unfortunately distorts my sample somewhat. It is of interest that despite the organic problem the provision of calm eating conditions, etc. was of help to the child and parent.
Significantly, a psychosocial intervention helped the child in the short term, but could not be maintained.

One year follow up showed deterioration in cases 2 and 3 in the areas of conduct behaviour, temper tantrums, aggression and refusal to sleep. In both these cases the mother’s health was the major problem. One mother was awaiting a full hysterectomy and had glandular fever. The father was made redundant, the family was under stress and the child management worsened, particularly mother-child interactions. In case 2, the mother lost her evening job and gradually developed agoraphobia.

On the whole the results with regard to maintenance are also very encouraging. The fact that all the children who have been classified as successful in therapy had been growing well or reasonably well and had not presented major eating problems, indicates that improvement in this primary target area was maintained. Furthermore, all mothers reported better relationships with the child and better family functioning. However, the independent follow-up findings brought to light several valid points.

(a) The social worker’s routine follow-up visits should be done more frequently in order to prevent or remediate any relapse over time. (Case 2 and 3). An 'open-door-on-tap' policy ('Contact me if you need help') is not sufficient. We need to be proactive rather than reactive if we are to pre-empt some of the
inevitable difficulties which recur or which, indeed, are new.

(b) The social worker’s involvement with these families should last longer as these children react quickly to any stress, as do some of the mothers.

(c) The majority of mothers of these children are inclined to panic when they experience any minor difficulties, especially with eating or unresponsiveness. They either get anxious and allow the child to do what he wants or become frustrated and restrictive. The maintenance of the improvement in conduct problems is notoriously difficult (Herbert, 1978). It is also hard to eliminate the mother’s fear about the child’s possible ‘slipping back’ into the old ways, such is their anxiety about a recurrence of those awful days when they were immersed in the problems. In spite of the fact that all the children (successful cases) made reasonable progress in growth and development (see Fig. 4 and that their eating behaviour didn’t cause any problem (apart from some difficulties in Case 2) a majority of mothers did not feel confident that it would stay that way.

A year had not elapsed for some of the cases so that there is still data which has not yet been analysed for presentation.

PROGNOSIS
The families who did best, i.e. where the treatment was highly successful, were those who were prepared to work hard and who became seriously involved in the assessment and treatment.

The families where there was support between the parents and a degree of commitment to a child and to each other, also tended to do well.

The degree of success was also related to the age (younger means better) of the child, but more specifically to the duration of the difficulties experienced; the earlier the intervention the better the outcome. This finding is in keeping with other findings on therapeutic outcome generally. Early, and better still, preventative work is obviously critical.

Once the damage is done and the mother-child relationship becomes indifferent, the treatment is problematic, as in these cases it is hard to motivate the mothers to start again from scratch and learn to relate to her child positively. But there is no need for therapeutic pessimism. Change is often (even if not always) possible.

It was also observed that the mothers who wanted to learn how to look after and care for the baby were able to recognise for themselves that the quality and quantity of their care was not sufficient or good enough (i.e. mothers who were insightful) also responded well to treatment.
The families that responded best to treatment and got most out of it were those who learned from the modelling, and began to apply the observed management procedures confidently and persistently. Thus the most successful mothers were those who worked hard to control their anxiety and frustration, and developed the ability to avoid the child (and the confrontations) when feeling angry, i.e. demonstrating the ability not to show their anger and frustration to the child.

Among the most successful mothers were those who asked for assistance when in difficulties, and who stated that they had 'faith' in the therapy. We cannot ignore non-specific (placebo) effects but should embrace them wholeheartedly in the therapeutic enterprise (see Herbert, 1981).

**REFLECTIONS**

This research revealed several worrying aspects which should be taken seriously if we want to prevent (or minimise) non-organic failure-to-thrive. There is a substantial lack of understanding and awareness amongst the health care professions not excluding social workers, about this problem, its implications, and understandably (given the sparse literature) the complex processes which bring about this serious and potentially life-threatening syndrome.

An acute feeding difficulty, which persists over a considerable time, results not only in the child's poor
growth and development but also (in some circumstances) in
distortions to the mother-child relationship—sometimes
leading to rejection, neglect and even at times, to
physical abuse (n.a.i.). Maternal deprivation of this kind is
linked (as we know only too well) with the evolution of
serious acting-out problems in children, which, in turn,
generate more rejection and sometimes at the end of a chain
of events well known to social workers, 'care' proceedings.

In a majority of the failure-to-thrive cases the families
had been experiencing difficulties for a considerable time
before really practical (i.e. fairly directive as well as
the more non-directive) help was provided. The mothers of
these children repeatedly approached their G.P.'s with
problems related to feeding and management; they were
usually dismissed by the kind of phrase, which meant, 'he is
going through a difficult stage, just persevere'. Repeated
visits were not usually taken seriously until the child was
so wasted that he had to be admitted to a hospital.

This is indeed very worrying, that the family doctor does
not always listen to what the mother is saying and does not
take action early enough. It seems essential that greater
attention should be paid to a mother's plea for help during
the early stages of failure-to-thrive (it is eminently
'treatable' early on); she should not be disregarded
automatically as a 'neurotic nuisance' or as an
'incompetent' and/or 'uncaring' mother. But in order to
recognise this potential danger and be able to prevent it,
a knowledge and awareness is needed which seems to be
lacking at the present time.

More emphasis should be placed during medical and social work training on the ability to listen and assess so as to recognise and (hopefully) prevent evolving problems at early stages of contact.

It was somewhat disturbing to find that only 5 out of 17 children were known to the Social Services Department in spite of two (on average) previous admissions to hospital for non-organic failure-to-thrive; some of these children were seriously 'at risk'. Since the first point of contact is with the medical profession, G.P.'s and then the hospital, the responsibility to pass over the case to an appropriate agency (when organic factors are excluded) for help, lies with them.

'Prevention is better than cure' may be a cliche, but the sooner we accept that any child who is failing to thrive is potentially at risk and that the problem needs urgent attention and a rigorously comprehensive psychosocial assessment at an early stage, the more readily we can prevent much misery, many 'social casualties', and some deaths.

Reflecting on the results of the work described in this thesis, reminds me of the point made by Fischer (1978), that casework in particular, and social work in general, deals with a host of complex and often overwhelming psychosocial problems, many of which no other profession
would even begin to deal with. But, he adds, 'None of these factors add up to a rationale for seeking to maintain the current, at best, equivocal state of affairs, and none seem to be a powerful enough argument to refute the major thesis - that caseworkers must constantly strive to improve their services and to enhance the effectiveness of their practice'. Why then, to take the United Kingdom in 1982 is there relatively speaking such little interest in a casework approach that has provided tangible evidence of effectiveness in areas of direct relevance to social work? There is little evidence that social workers and social work educators have enquired seriously (i.e. critically) into the potential value of behavioural casework as one social work method among others.

Herbert (1978: unpublished paper) says that the onus is no longer on the social worker to present an apologia for including behaviour modification in her repertoire of social work (casework) methods, but rather on the social worker (who through hostility or indifference neglects behavioural theory and its applications) to justify her stance. There are two main reasons for making such an assertion: the first - a negative - is to do with the controversial but nevertheless disappointing results of traditional casework methods. The second is more positive and concerns the research evidence of effective applications of behaviour modification in wide areas of relevance to social work (e.g. Sheldon, 1982).

In my experience, working in the multidisciplinary team in
the hospital, the behavioural approach embedded in my
generic social work interventions, was understood,
appreciated and seemed to gain considerable credibility
amongst the doctors and nursing staff. There should be a
position of equality among professionals in the
multidisciplinary team. Sadly this is not always the case,
especially in hospitals where social work is often devalued
or underrated. Indeed this applies to any other setting.
But to gain position and respect, the social worker must
demonstrate clearly and confidently his or her knowledge
and produce measureable evidence of his/her intervention
(i.e. measures of change).

I have little doubt that by using behavioural casework for a
wide range of problems this can be achieved. Hopefully,
this thesis adds a little evidence to support such an
affirmation.
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HARPER, L.V. 1975. The scope of offspring effects from caregiver to culture. Psychological Bulletin. 82, 784-801.


SHIRLEY, M.M. 1933. The first two years: a study of twenty-five babies. 3 vols. Minneapolis, Minn., Univ. of Minnesota Press.


# APPENDIX I

## Illustrative Examples of Coding Criteria

### FEEDING

<table>
<thead>
<tr>
<th>Number</th>
<th>Category</th>
<th>Poor</th>
<th>Average</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Feeding on Liquids</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>1</td>
<td>Sucking</td>
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<tr>
<td></td>
<td>Poor Average Good</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td></td>
<td>0 - Extreme sucking problems. Inability to suck. Falls asleep every 2-3 minutes. Feeding takes 1-2 hours. Intake of liquid minimal (not sufficient).</td>
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<td>2 - Vigorous sucking. Takes feeds quickly of the required amount.</td>
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<td>2</td>
<td>Retaining of hunger</td>
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<tr>
<td></td>
<td>Poor Average Good</td>
<td>0</td>
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<td>2</td>
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<tr>
<td></td>
<td>0 - Brings up liquids after almost each feeding. All that is taken is vomited.</td>
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<td></td>
<td>1 - Brings up liquids occasionally but not a great amount.</td>
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<td>2 - Retains liquids well - no problem.</td>
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<tr>
<td>3</td>
<td>Indications of hunger</td>
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<tr>
<td></td>
<td>Poor Average Good</td>
<td>0</td>
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<td>2</td>
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<tr>
<td></td>
<td>0 - Never indicates hunger by crying or being unsettled. No interested in food. Does not become excited when the bottle is seen.</td>
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<tr>
<td></td>
<td>1 - Occasionally cries when hungry. Usually unsettled around feeding time.</td>
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<td>2 - Nothing will stop the hunger cry. Becomes very excited when the bottle is seen.</td>
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<tr>
<td>Number</td>
<td>Category</td>
<td>Feeding on Solids</td>
<td>Swallowing</td>
<td>Chewing</td>
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<tr>
<td>4</td>
<td>Reaction to Baby food</td>
<td>Poor</td>
<td>Average</td>
<td>Good</td>
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<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>5</td>
<td>Reaction to Home Food</td>
<td>0</td>
<td>1</td>
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<tr>
<td>6</td>
<td>Swallowing</td>
<td>Poor</td>
<td>Average</td>
<td>Good</td>
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<td>7</td>
<td>Chewing</td>
<td>Almost Always</td>
<td>Occasionally</td>
<td>Almost Never</td>
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<td></td>
<td></td>
<td>0</td>
<td>1</td>
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<tr>
<td>8</td>
<td>Retention of food</td>
<td>Almost Always</td>
<td>Occasionally</td>
<td>Almost Never</td>
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<td></td>
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<tr>
<td>Number</td>
<td>Category</td>
<td>POST-EATING BEHAVIOUR</td>
<td>CRITERIA</td>
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<td>--------------------------------------------------------------------------</td>
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<tr>
<td>9</td>
<td>Vomitting</td>
<td><strong>Frequent</strong></td>
<td><strong>Occasionally</strong></td>
<td><strong>Almost Never</strong></td>
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<td></td>
<td></td>
<td>1 - Might occur occasionally when upset during feeding or dislikes the food.</td>
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<td>2 - Rarely vomits. No cause for concern.</td>
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<td>10</td>
<td>Diarrhoea</td>
<td><strong>Almost Always</strong></td>
<td><strong>Occasionally</strong></td>
<td><strong>Almost Never</strong></td>
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<td></td>
<td></td>
<td></td>
<td>1 - Occasionally happens.</td>
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<td>2 - Happens very rarely or never.</td>
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</table>

**POST-EATING EXPRESSION OF MOOD**

<table>
<thead>
<tr>
<th>Number</th>
<th>Category</th>
<th>TYPES OF MOTHERS - FEEDING STYLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Withdrawal</td>
<td>Mother who has little patience to feed her child. Becomes angry and frustrated when facing feeding difficulties. Her feeding style is forceful. Screams and shouts, smacks and throws the baby or the food.</td>
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<td></td>
<td>Irritability</td>
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<td></td>
<td>Crying</td>
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<td></td>
<td>Contentment</td>
<td></td>
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<tr>
<td>12</td>
<td>Forceful, angry mother, persistent</td>
<td>A mother who is not concerned whether child is fed or not. Feeding time is not observed. Hunger is ignored. Food is</td>
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<tr>
<td></td>
<td>Unconcerned, neglectful mother.</td>
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<tr>
<td>Number</td>
<td>Category</td>
<td>CRITERIA</td>
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<td>----------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
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<tr>
<td></td>
<td>Determined, coaxing mother.</td>
<td>Positive approach to feeding and handling the baby. Mother is determined</td>
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<td>that the baby takes the food. She is calm, loving and encouraging but</td>
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<td></td>
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<td>prompts him in a firm way.</td>
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<td></td>
<td>Not persistent, a passive mother.</td>
<td>A mother who gives up easily. Cannot cope with the child's refusal to</td>
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<td>eat. Becomes upset easily and is inclined to cry if the baby does not</td>
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<td>take food. Often is depressed.</td>
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<td>13</td>
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<td></td>
<td>Size of Family</td>
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<td>Large</td>
<td>Small</td>
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<td></td>
<td>Ordinal Position</td>
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<td></td>
<td>First Born</td>
<td>Not first born</td>
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<td></td>
<td>Only Child</td>
<td>Not only Child</td>
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<td></td>
<td>Social Class</td>
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<td>Financial Position</td>
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<td></td>
<td>Inadequate</td>
<td>Marginal</td>
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<td></td>
<td>Living Conditions</td>
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<td></td>
<td>Marital Relationship</td>
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<td></td>
<td>Inadequate</td>
<td>Marginal</td>
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<tr>
<td>0 - Separated partner, does not support when so ordered. Extremely disturbing influence on the family. Extra marital relations endangering children's welfare or has to come to the attention of the law. Emotional tie so deficient that children endangered. Severe persistent marital conflict necessitating intervention by authorities or threatening complete disruption of family life.</td>
<td></td>
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</tr>
<tr>
<td>1 - Parents separated. Partner does not support adequately or regularly or is a disturbing influence on the family. Extra marital relations exist but do not adversely affect welfare of children. Weak emotional tie between parents, lack of concern for each other. There are some points of agreement between parents but disagreements and conflicts tend to predominate and obscure them.</td>
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<tr>
<td>2 - Marked lack of affection and emotional ties among family members. Conflict among members persistent or severe. Extra-marital relations if present at all are minimal and transitory and do not jeopardise family solidarity. Positive emotional tie between partners who can express need for the others. Considerable pleasure derived from shared experiences. Consistent effort to limit duration of marital conflict and keep communications open. Couple live together.</td>
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<td></td>
<td>Family Solidarity and Unity</td>
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<td></td>
<td>Inadequate</td>
<td>Marginal</td>
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</tbody>
</table>
| 0 - Marked lack of affection and emotional ties among family members. Conflict among members persistent or severe. No pride in family or family identity. Members plan or personal gratification rather than family as a whole. Serious danger of family
<table>
<thead>
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<th>Number</th>
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</table>

**CRITERIA**

1 - Little emotional warmth evident among family members. Family members often in conflict. Little cohesiveness, such as members rarely do things together, eat together, little planning towards common family goals. Little feeling of collective responsibility, little pulling together in a crisis.

2 - Warmth and affection shown among family members, giving them a sense of belonging and emotional security. Conflict dealt with quietly and appropriately. Members often do things together, eat together, family plan and works towards some common good. Definite feelings of collective responsibility. Members pull together in times of crisis.

<table>
<thead>
<tr>
<th>Mother's background</th>
<th>Inadequate</th>
<th>Marginal</th>
<th>Adequate</th>
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<tbody>
<tr>
<td></td>
<td>0</td>
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<table>
<thead>
<tr>
<th>Father's background</th>
<th>Inadequate</th>
<th>Marginal</th>
<th>Adequate</th>
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</table>

0 - Difficult childhood in terms of physical and emotional needs. Children in danger because of extreme conflict or eminent disruption of family life. Serious neglect of children or other types of behaviour. Minimal concern for children's welfare. Extremely poor education and lack of socialisation.

1 - No violations of major laws in the family. Uneventful childhood. Family life marked by conflict or apathy which is a potential threat to welfare of children. Poor educational encouragement to do something worthwhile.

2 - Laws obeyed and observed. Children raised in an atmosphere conducive to healthy physical and emotional development. Socialisation process carried out affirmatively. Adequate training in social skills. Good education.
<table>
<thead>
<tr>
<th>Number</th>
<th>Category</th>
<th>Inadequate</th>
<th>Marginal</th>
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<tr>
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<td>Relationship among Children</td>
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<tr>
<td></td>
<td>Child's Behaviour</td>
<td>Difficult</td>
<td>Average</td>
<td>Easy</td>
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</table>

**CRITERIA**

0 - No affection shown between mother and child. Great indifference or marked rejection of child. No contact, no approval, recognition or encouragement shown to a child. Child is nearly unnoticed. Routine care given in a detached way.

1 - Affection and physical contact between mother and child intermittent or weak or obscured by conflict. Mother's anger unpredictable and unrelated to specific conduct of a child. Marked favouritism with no attempt to compensate disadvantaged child.

2 - Affection and physical contact between mother and child. Child has a sense of belonging, emotional security. Mutual concern, free communication and desire for harmony.

0 - Conflict between children resulting in physical violence or cruelty which requires intervention. Fighting occurs often, teasing, bullying and other physical or emotional cruelty.

1 - Emotional ties among children weak. Rarely play together or share play things. Show little loyalty to one another or pride in each other's achievements.

2 - Positive emotional ties and mutual identification among children. Depending on age, often play together, share play things. Enjoy each other's company. Fighting and bickering normal for age.

**EXPERIMENTER OBSERVATION AT HOME**

0 - Child's behaviour difficult to cope with. Persistent crying, irritability, aggressive acting out behaviour.

Withdrawn, lethargic behaviour. Refused to play or to join in activity with other children.
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<th>Number</th>
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### Mother-Child Interaction

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### Father-Child Interaction

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### Child's behaviour at the Nursery or playgroup or Foster Home

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<th></th>
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### Interaction with children at the nursery or foster home

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### Relationship with caretakers

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### Eating at the nursery or

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### CRITERIA

1 - Child's behaviour unpredictable but manageable. Mother needs to spend considerable time to control or amuse the child. Some confrontations acute.

2 - Easy to amuse and stimulate. Joins activity and plays happily.

0 - Little physical contact with the child. Lack of responsiveness to child's needs when in distress. Little vocalisation, smiling, touch, almost never plays with the child or encourages him to explore his environment.

1 - Inconsistent physical contact with the child. Responsiveness limited. Occasional vocalisation and smiling to the child. Play and encourage child to explore the environment is limited.

2 - Warm and positive physical contact with the child. Child's cry for comfort is attended to. Mother smiles and talks to her child. Plays with him frequently and encourages him to explore his environment. Makes sure he has contact with other people and objects.

EXPERIMENTER OBSERVER AT THE NURSERY, FOSTER HOME
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<tr>
<td>0 - Child's movements and play is extremely restricted. He cannot scatter the toys or play with them freely. He cannot explore his environment or touch anything. Child is punished frequently for littering the room with toys. Interaction with siblings and other children is non-existent because of noise etc.</td>
<td></td>
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<tr>
<td>1 - Child is encouraged to play freely with toys and other children. He is allowed and encouraged to explore his environment in a consistent and positive way.</td>
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### Hospital Observational Data

1. Age of child
2. Sex
3. Date of admission
4. Date of discharge
5. Weight and length on admission
6. Weight and length on discharge
7. Number of Mother's visits
   - (a) Every day
   - (b) Occasionally
8. Number of Father's visits
   - (a) Every day
   - (b) Occasionally
9. Child's reaction to mother's departure:
   - (a) Did child cry
   - (b) Was the child withdrawn for a while
   - (c) Was the child indifferent
   - (d) Any other reactions?
10. Child's reaction to the father's departure:
    - (a) Did the child cry
    - (b) Withdrawn for a while
    - (c) Indifferent
    - (d) Any other reactions?
11. Which visitor did the child miss most
    - (a) Mother
    - (b) Father
    - (c) Other visitor(s)
FEEDING

12. How was the child to feed after admission
   (a) Very difficult
   (b) reasonable
   (c) good

13. Did the child vomit
   (a) After each meal
   (b) Occasionally

14. How was the child to feed at discharge
   (a) Difficult
   (b) Reasonable
   (c) Good

15. Did the mother feed the baby/child

16. Did he/she take the food from her readily

17. Did she/he refuse the food

18. Did he/she prefer to be fed by a nurse

19. Did she/he prefer to be fed by Father

ON ADMISSION

20. Did nurses find the child likeable

21. Did nurses find her/him irritating

22. Was he/she easily amused

23. Did she/he cry a lot

ON DISCHARGE

24. Was the child easy to handle

25. Had the child changed for better in:
   (a) moods
   (b) playing
   (c) crying
   (d) no difference
   (e) other changes
### Table: Operant and Modelling Components

<table>
<thead>
<tr>
<th>Operant</th>
<th>Modelling</th>
<th>Self-cont.</th>
<th>Relaxation</th>
<th>Structured Interaction</th>
<th>Over learning</th>
<th>Desensitization</th>
<th>Thought stopping</th>
<th>Written contracts</th>
<th>Develop counselling</th>
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<td>(94%)</td>
<td>(94%)</td>
<td>(53%)</td>
<td>(47%)</td>
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### Operant

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<th>Symbolic Reward</th>
<th>Tangible Reward</th>
<th>Time-out</th>
<th>Repose-Cost</th>
<th>Extinction</th>
<th>Prompting (Shaping)</th>
<th>Punishment</th>
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<td>(35%)</td>
<td>(29%)</td>
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### Social Work Intervention Components

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<th>Welfare Rights</th>
<th>Behavioural Case Work</th>
<th>Counselling (Marital)</th>
<th>Legal Proceedings (Care Order Adoption)</th>
<th>Provision of Day Care</th>
<th>Provision of Community Care &amp; Support</th>
<th>Group Work</th>
<th>Fostering</th>
<th>Housing</th>
<th>Regular Supervision</th>
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A questionnaire was devised in order to assess the changes that occurred as a result of clinical intervention. Interviews were standardised as far as possible though due to variations in the problems encountered by the respective parents, not all questions were relevant to every case. Some of the answers required were qualitative in nature, whilst others were quantitative and were scored along a scale ranging from +2 to -2, according to the degree of improvement/deterioration shown.

As a basic guide:

- A score of +2 signifies a marked improvement
- A score of +1 signifies a slight improvement
- A score of 0 signifies no change
- A score of -1 signifies a slight deterioration
- A score of -2 signifies a marked deterioration

The results of each interview are presented separately in Appendix C.

The research questionnaire was as follows:

**HERE AND NOW**

1. Is the household composition the same? When did the treatment programme end, how long did it last?

2. How would you describe the situation with X now?

3. Have any target behaviours re-occurred? If yes:
   a) Which?
   b) When and how often?
   c) How badly?
   d) Why do you think?
   e) What did you do?
   f) Are they still occurring?
   g) Will you seek help, or are you confident that you can cope with the problem yourself?

4. Have any other problems developed?

5. How do you feed towards X now?

6. Do you feel that your relationship is improving/improved?

7. Do you still worry re X?

8. Do you think that the problems may return?

9. Would you be able to cope?

10. How do your husband and other children feel re X now?
11. Do you spend more time with X, playing, talking?
12. Has the amount of physical contact between X and yourself changed? More or less?
13. Do you feel more comfortable in X's company?
14. Does X come to you for comfort?
15. Has your social life etc., improved?
16. Has you relationships with other children changed?
17. Has X's relationship with siblings changed?
18. Have X's siblings changed in their attitude to X?
19. Has X's father changed in his attitude to X?
20. Has X's behaviour towards father changed?
21. Have your relationships with your husband changed?
22. Has X's food intake improved?
23. Has X gained weight?
24. Has X grown?
25. Has X's physical appearance changed?
26. Has X's health improved?
27. Has X's cognitive abilities improved?
28. Has X's demanding, shouting, etc., improved?

X AT TIME OF REFERRAL

29. Can you describe to me the sorts of problems that you were having with X? Which was the most worrying .......... least worrying etc.,
30. Was X the only child with this problem?
31. How long had the situation being going on?
32. How did you feel about the behaviour?
33. How did you try and cope with it?
34. What were you feelings towards X?
35. When, where, with whom, did the behaviour or difficulty occur?
36. Do you remember how many, and which problems that you and Mrs. Iwaniec decided to concentrate on?
37. What were the target behaviours?
36. What were the rewards for good behaviour?

39. What were the sanctions for unwanted behaviour?

40. Was the programme difficult to stick to?

41. Who was running the programme? Was it you alone, or the whole family?

42. Did the role you had to play become easier as the project progressed?

43. What were your expectations of the project?

44. What did you want to result from the project?

**IMPLICATIONS AND THE FUTURE**

45. Why do you think it worked/failed?

46. Who made it work/fail?

47. Do you feel capable of coping with X's behaviour now and in the future?

48. Do you feel confident that X's improvement is permanent?

**AT THE END OF THE PROGRAMME**

49. At the end of the programme how successful did you think it had been?

50. Can you describe the differences in target behaviours:

   - in frequency
   - in intensity
   - in setting

51. Did you feel that X's behaviour had changed in other ways?

52. Had any new problem behaviour appeared?

53. Had there been any lapses in X's behaviour during the course of the programme?

54. If YES, how did you cope?

**QUESTIONS THAT CANNOT BE SCALLED**

55. With the benefit of hindsight would you repeat this programme?

56. Were there any aspects of the programme that you thought were very useful, detrimental, or which you particularly disliked?

57. Do you have any advice for parents about to embark on such a programme?
58. Can you suggest any improvement?

59. How did you look upon Mrs. Iwaniec?

60. How did you see her role in therapy?

61. Was it difficult to get back to normal life once therapy had ended?

62. Do you feel able to comment on, and make alterations to the programme?

63. Did you suffer any conflicts as you were both mother and therapist?
A Binomial Test on all Questions where Quantitative Measures could be Applied (one tailed)

Key:
Worse = W  Same = S  Better = B  Number in Sample = N  Question No. = Q

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<th>N</th>
<th>W</th>
<th>S</th>
<th>B</th>
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Summary:
No case had become worse overall. For all questions the overall situation was the same or better. There was a significant improvement in 11 Areas:

1) Overall situation;  P < 0.005
2) Feelings towards X;  P < 0.05
3) Relationship;  0.1
4) More time playing with X;  P < 0.05
5) Ease in X's presence;  P < 0.01
6) X coming to mother for comfort;  P < 0.001
7) X's behaviour to father;  P < 0.02
8) Food intake;  0.02
9) Wife's relationship with husband;  P<0.02
10) Physical appearance  0.1
11) Cognition;  0.1
Case 4

Russell P.
d.o.b. (16.7.1976)
birth weight 6lbs 2oz

Reason for referral:

Russell was referred to me during his third hospitalization for failure to thrive at the age of 24 months. His third hospitalization occurred only two days after being discharged from Ward C.H.I where he stayed for two weeks. He developed diarrhoea and vomiting increased. At the time mother-child relationship had broken down. She refused to visit the child in hospital and requested reception of Russell into care as she could not cope any longer with trying to feed him nor could she tolerate his ways of behaviour and her negative feelings towards the child.

Family Composition:

Father: Aged 28 Plumber
Mother: Aged 28 Housewife
Simon: Age 4 years At Home
Russell: Age 2 years At Home
Neil: Age 2 years At Home

Living Conditions:
The family live in a pleasant semi-detached house in a residential area twelve miles away from Leicester. The house is nicely furnished, clean and the material standards are high.

Financial Position:

Mr. P. earns reasonably good wages and provides well for the family. They are all well dressed and the house is well equipped. The couple have very materialistic views as to how they should spend their money. They like to see something for the money they spend. When it comes to spending on the children rather than clothing, food, toys, they consider this unreasonable and very often will not do what is expected of them or what is necessary for the childrens' well being.

Family Background:

Mr. & Mrs. P. were married seven years ago both at the age of 21. After marriage they lived in a rented accommodation and both worked in hosiery. Just before their first child was born in 1974 they bought the present house and have lived there ever since. The marriage was reasonably stable and happy until the twins were born. Because of excessive difficulties with Russell, marital relationship has deteriorated. There were endless arguments and quarrels between the couple. Mrs.P demanded constant help from her husband which interfered with his work.
Both Mr. & Mrs. P. have little contact with their families and consequently received very little help or support.

Father's Background:

Mr. P. comes from a working class family of four children. After leaving school at the age of 16 years he worked in the hosiery and then in the roofing business. His relationship with the parents and siblings has never been a close one although he cannot specify why. As children they did not get much encouragement or real warmth. His contact with them is very rare. He is hardworking and provides well for his family. He seems to be very fond of his children and tries to spend as much time with them as possible. In a way he has always tried to give Russell more attention and affection to compensate his wife's emotional indifference towards the child.

Mother's Background:

Mrs. P. comes from a working class family of three children. Both parents were very strict and demanding. Soon after leaving school she also left her home and went to work in a hosiery factory where she met her present husband. She also has very little contact with her family. Mrs. P. is a very house-proud lady, continuously cleaning and polishing, making sure that everything is in its place. The children are very restricted in their movements. There are iron rules as to what they can or cannot touch, when they can play and whether they can take their toys out of the boxes which are meticulously sorted out. I find Mrs. P. rather difficult to work with. It is hard to communicate with her in a coherent or constructive way. She is rather rigid when it comes to child rearing and finds it difficult to understand the needs of each child. Her basic physical care for the children is excellent but emotionally she is unable to give them what they need especially Russell who needs attention and affection. She worries about Russell and at times becomes extremely anxious. She appears to be suspicious and withdrawn most of the time and seldom smiles or is in a good mood. Intellectually she is below average but has good common sense. Mrs. P. is emotionally unstable, easily affected by feelings and temperamentally not an easy person.

The Child:

Pregnancy:

Pregnancy was not planned. It was a difficult pregnancy with sickness, lack of energy and appetite. Mother became acutely depressed when she learned that she was going to have twins. There were no complications.

Birth:

The twins were born at full term, weighing both 6 lbs. 2 ozs. Russell was born first, quick and easy birth with no breathing difficulties. Neil was delivered by Forceps and went to a Special Care Unit for 3 days. Mother and the twins stayed in hospital for ten days. There were no feeding difficulties whilst in hospital.

Feeding History:

For the first few days he was reasonably easy to feed although it took a long time to feed him. In the third week he began to vomit fifteen to twenty minutes after his feed. In the fourth week his vomiting increased and he was then seen by the G.P. and consequently admitted
to hospital for Pyloric Stenosis. He stayed in hospital for twelve days. His feeding improved a little, there was only occasional vomiting and sucking became more vigorous although he was falling asleep every few minutes. When solids were introduced at about 5 months of age he refused to take it and also stopped taking liquids. From that time onwards the feeding became a battle. He would not open his mouth and kept pushing the bottle away. Mother shouted at him, shook him, smacked him, getting angrier and more frustrated each day. When she wanted to force something into him he screamed and vomited immediately. Then he began screaming for long periods of time just at the sight of the mother. She could not touch him or go near him. She would take him upstairs to his cot and he would calm down and just lie there quietly for hours practically not moving looking withdrawn and detached. Because of the total rejection of food from the mother, Russell was only fed when father returned from work to feed him. He would cheer up a little when the father was present. He also took feeds from the next door neighbour, his little brother and the health visitor when she became involved with the case. Russell was losing weight rapidly and mother thought that he was going to die. He was seen by the G.P. and then at the Paediatric Assessment Centre by Dr. Moore. He was admitted to hospital from the Paediatric Assessment Centre for medical investigation for failure to thrive. At that time I was asked to take the case as this child caused much concern. He was grossly wasted well below third centile (at 14 months his weight was 6 kg - 600 gr. height 69 cms.).

Development:

Russell's development is one of the serious causes for concern. Very slow on a motor level, sat up at ten months, could stand up on his own at eighteen months and started walking at twenty months.

Language:

First words heard at twenty months but they were spoken very clearly. He still at two years three months cannot build up short sentences. There is still little verbal communication and little attempt to do so. His understanding is good. He will respond to the mother's requests and do what he is asked.

Social Development:

Social development is very poor. He cannot join with others and finds it difficult to build up little relationships. He remains rather aloof and detached.

Toilet Training:

Russell is fully toilet trained now during the day. Bowel control at 22 months and bladder control at 2 years 1 month.

Russell's Temperamental Characteristics and Behavioural Style:

Russell tends to be of very low activity level, average adaptability, height rhythm (like sleeping, waking up, bowel movement etc.), which should make basic care of him easy. He has a high threshold of responsiveneness which means he is not a very sensitive child (pain, illness high tendency to withdraw rather than approach eg. new people, places experiences etc., and pronounced tendency to negative moods. He would come to the category between 'slow to warm up' and 'difficult'.

Sleeping Pattern:
Russell has always slept more than his twin brother or an average child of his age. He slept through the night, immediately after breakfast, before dinner, after dinner and was put to bed at night at 6.00 p.m.

Observation of the Child at Home:

Mother-Child Relationship and Interaction:
Russell's eating improved a little after being discharged from hospital. Mother felt more at ease and more relaxed. The atmosphere at home was not so heavy and depressing. Russell stopped screaming when with his mother but remained very detached. During my several assessment visits he sat quietly with an expressionless face not touching anything or trying to play with his brothers. Apart from crying I have not heard any recognisable sounds. I have not seen any attempts from the mother to play or talk to him nor did I see mother ever smile at the child or touching him etc. Apart from regular care like feeding, changing, bathing, dressing she hardly noticed him. Even during these events she looked blankly at him not talking. I have never seen her hugging or cuddling Russell. Her reaction to Neil, (the twin) and Simon was far more positive. Mrs. P. is not a demonstrative person but would play a little with the other children, carry them, sit them on her lap, smile and talk to them, occasionally usually when correcting them.

Father-Child Relationship and Interaction:
Father was always the person to whom Russell responded well. His sad and expressionless face would brighten at the sight of his father. He would smile at him, reach for him to play with him. Mr. P. showed a lot of patience when feeding him and would persist despite Russell's refusal at times. Week-ends have always been better times because father used to take over the care of Russell and the other children.

Relationship with Siblings:
There has always been very little interaction between Russell and the two boys. Simon played with Neil and very occasionally would attempt to approach Russell. Neil would just push or slap Russell or take a toy from him. Russell would cry and would never stand up for himself. While the two others were playing he would sit or stand in one place looking blankly at them. When they were in the garden he played alone and would not try to join in.

Discussion with Mother while Russell was in Hospital:
During my first visit mother remained apprehensive, suspicious and did not want to enter into any discussion regarding visiting Russell in hospital. Her argument was that there was no point in seeing him because he did not want to have anything to do with her. He would only scream at the sight of her which would make things worse and would embarrass her. Nevertheless she accepted my offer to help in order to improve their relationship (with some reservations) and agreed to go through the assessment. I emphasized the importance of her seeing Russell in hospital as frequently as possible. She agreed to see him but without any commitments. She did see him twice during two weeks of hospitalization. Father visited every evening.
Observation of the Child in Hospital:

When first admitted to hospital Russell was very fretful. He screamed and then cried. The nurses found him difficult to handle. He was unresponsive when approached to be played with. They found him rather stubborn and irritating. He took feeds quite well. During the second week he became clinging and demanded constant attention. He stopped crying and became more relaxed. He would not play with toys, rather he sat in his cot not touching anything. During the mother's visit he remained withdrawn and took feeds better from the nurses than his mother. When the father visited he responded to him with happy greetings and seemed more alert and contented. He took feeds from the father well.

Social Work Intervention:

My first task was to establish which areas were most problematic, assess them carefully and then plan some meaningful intervention. The data was obtained by discussions with the mother, both parents and other relevant people (Health visitor, G.P. next door neighbour, hospital staff) and direct observation both at home and the hospital.

The mother was mostly concerned with feeding and moodiness. I was very concerned about their relationship and the consequences that could follow if nothing was done about it. Mother was asked to record each feeding; did the child feed very well, well, little, very little or nothing. At what mood was the child before the meal and in what mood was the mother. She was also asked to record periods of his irritability and withdrawal. In order to pin-point the child's and his mother's behaviour and reaction we went through so called 'typical days' in the child's life. Taking a bad day and a good day and then we went through the analysis. Because of the seriousness of Russell's condition and position at home, he was put on the at 'Risk Register'.

Functional Analysis:

Target Behaviour 1

Eating:

Antecedent Events:

Russell would take feeds from everyone but his mother, mornings were exceptionally difficult. While in hospital he used to take little feeds from her but not at home. He would take them well from his father, neighbour and brother. His refusal to eat could last from 1 - 2 days to 5 - 6 days. Mother felt frustrated and anxious before each feeding, approaching him in a bad mood herself.

Behaviour:

He would turn his head away, push the bottle or spoon or screamed for a long time. Whenever he was forced to eat he would immediately bring it back or he would develop diarrhoea.

Consequences:

Mother was getting angrier as the time went on. She would shout and scream at him, kept shaking and hitting him and then would just put him to bed and leave him there.
Target Behaviour 11

Moodiness, Irritability and Withdrawal:

Antecedent Events:

Moodiness occurred most of the days regardless of places and time but mostly with the mother and at home. It usually took the form of withdrawal, or bursting into tears. At each meal time he seemed to be anxious when he was sitting down to eat. When mother persisted with feeding he would scream. At other times he was withdrawn, sitting still or lying down. With father he was more stable and cheerful. When he was asked to do something he would cry and always when he was corrected or scolded.

Behaviour:

Russell looked sad or expressionless, not moving, standing still or sitting still sobbing or screaming in an irritating way, totally detached.

Consequences:

When he was in a screaming mood mother would scream back, hit him and then take him upstairs to his bed where he would stay for hours. When he was withdrawn she would ignore him and would not take any notice as she felt it was pointless.

Clinical Formulation:

Russell's unfortunate position in the family and his behaviours is the result of a complex interaction of social somatic, congenital and psychological factors.

1) Unplanned and not wanted pregnancy which was aggravated when mother learned that she was to have twins. She hoped to have girls and felt disappointed when Russell and Neil were born.

2) Russell's early physical problem Elyloric Stenosis produced extra stress as he was crying a lot and vomiting. That in turn made the formulation of attachment more difficult.

3) Mother having to care for two babies found increasingly difficult to cope with Russell's slow feeding and crying. She found him unrewarding and hard to enjoy. Russell received little positive attention and stimulation. On the contrary, her approach to the child was cold, angry, or indifferent.

4) Mother had almost no help at all in terms of regular child-care and contradictory advice as to how to cope with Russell's feeding and moodiness. This has led to feelings of hopelessness and helplessness in mother.

5) Russell being a child of a 'slow to warm up' temperament needed extra patience from his mother to allow him to adapt and adjust to new experiences in his own time. Instead he was pressured to feed quickly on demand. When he fed slowly or refused to eat, mother would get angry and frustrated, screaming at him, shaking him, or smacking. When she forced him to eat, he screamed, vomited immediately and then had diarrhoea. Eventually Russell began to
scream at the sight of his mother and stopped taking feeds from her altogether. She could not touch him or come near him. In anger and helpless despair, she would take him upstairs and leave him there for hours.

6. Looking at this pattern of interaction, it seems likely that the child learned on a classical 'classical-operant' basis to avoid food by associating feeding with painful experiences, e.g., forcing, hurrying, shaking, scolding and finally, mother's person became an aversive stimulus control in evoking fear which (in proximity) brought physical symptoms like vomiting and diarrhoea if mother was angry.

Being reared in social isolation and lacking stimulation it is not surprising that Russell manifested development delays.
**MEDICAL HISTORY**

Russell's Hospitalization:

Russell was hospitalised five times during 2 years. Altogether he spent 68 days in hospital.

First admission at the age of 4 weeks. He had Pyloric Stenosis and a urinary tract infection. Four subsequent times he was hospitalised for failure to thrive. During the intensive investigations and testing no organic reason was found for his poor growth and retarded development.

He is below the 3rd percentile in weight and height.

a) He frequently suffers from colds.

b) Is vulnerable to catch infections.

c) Frequent episodes of diarrhoea.

d) Vomiting.

**Intervention Treatment**

**Feeding Programme:**

**Stage 1**

Feeding is to be modelled by a social worker (researcher) 4 - 5 times.

1) Mother was asked to give Russell a lot of attention before each meal, in order to reduce his anxiety and bring him to a relaxed and good mood. Mother was asked to take Russell with her to the kitchen while she was preparing a meal. She was asked to talk to him in a soft reassuring way, smile at him and be gentle when touching him or giving him instructions.

2) She was to encourage him to eat, prompting him casually, helping him, if in difficulties to feed himself.

3) She was asked not to force him to eat or to shout at him if he refused to eat. She was to leave him and feed him later.

4) Mother was instructed not to feed him if she was in an angry mood.

5) Mother was to do relaxation exercises twice a day - to achieve a reasonable level of calmness and to reduce tension.
Stage II

The situation deteriorated while I was abroad for a few weeks. During my absence he was bruised by mother, his irritability and detachment increased and also his eating worsened. I found mother extremely anxious, shaking, unable to hold a cup or to do anything. She was also very depressed, stopped eating, lost a lot of weight, did not sleep at all, lost interest in housework, did not cook or clean. After meeting Mr. P. and discussing the seriousness of the present situation it was mutually agreed to:-

a) Place the twins in the day nursery, (preferably full-time if possible)

b) Arrange for Simon to stay with a family friend.

c) Mrs. P. to see her G.P. to get some tranquilizers and anti-depressants. G.P. to refer the mother to the psychiatrist.

d) I was to do some relaxation exercises with her, using relaxation tape.

e) Counselling with the mother and then both parents.

(Ask Prof. McNeish to see Russell frequently in Out-patients clinic).

The plan of crisis intervention was carried out immediately with good response from everybody. While the children were away from home, Prof. Herbert and I could concentrate on mother, providing:-

a) Intensive counselling and support - regarding her depression - child development and emotional needs - relaxation 3 times a day.

b) G.P. called every day to see how she was, monitoring medication.

c) Health Visitor visited daily to provide some support.

Nine weeks of intensive therapy showed good results. Mrs. P. began to function better, became calmer and more optimistic. At this time I began to plan treatment programme to improve mother/child interaction, to desensitization Russell's fear towards the mother and mother's anger and hostility towards Russell. A formal contract was signed by the mother, father and a social worker to carry on devised treatment.

Stage III

1) Increase the interaction (of positive kind) between mother and Russell.

2) Desensitization of Russell's anxieties with regard to his mother.

3) Desensitization of mother's negative feelings towards the child.

4) Increase family interaction, like parents and children playing together and doing things together.
Method:

Mother is to play exclusively with Russell every evening after father comes home from work. (from about 5.30 p.m.)

- 10 minutes - first week
- 15 minutes - second week
- 20 minutes - third week
- 20 minutes - fourth week

Whilst mother plays with Russell, father should take Simon and Neil for a walk or to the garden.

After Russell has had his session with mother, father with the children should join them to play together.

Toys:

Telephone, bricks, leggo.

Mother should play with Russell on the floor. She must talk to him, saying what they are going to do and what for. She should speak in a soft, warm way encouraging Russell to participate in the play.

Social Reinforcement:

Mother should smile at him, praise him, touch him, hug him, if he does something right, like passing a brick, answering the telephone, etc.

Story Reading:

Mother sits Russell on her knee and holds him close while reading a story.

Stage IV

Overlearning:

1) Interaction with Russell for the next two weeks has to be constant (from early morning until he goes to sleep). Mother has to take him wherever she goes, like the bathroom, kitchen, while washing etc., She has to talk to him in a soft warm way, smile at him, cuddling him spontaneously.

2) He must not be separated from her at any point of time. Mother must encourage him to come to her without any hesitation or uncertainty. She must help him in those moments, (open her arms, pick him up, kiss him, hug him).

3) Mother must talk to him about what she is doing all the time regardless whether she feels like it or not - regardless of whether he understands or not - be in a good mood.

4) Play and read to him and his brother. Encourage him to play with his brother. Read to them a story at bedtime while they are in bed.

5) Praise him for each correct action and movement, not only verbally, but physically as well. (Kiss him, hug him, smile at him).
AGREEMENT:

I agree to the following programme:-

a) Playing with Russell every day for the required period of time and behave in a manner suggested in the programme.

b) To read a story to him every day, while sitting him on my lap and holding him close to me.

c) We agree to play everyday together as a family, putting special emphasis on Russell.

MOTHER...........................................

FATHER...........................................

SOCIAL WORKER...............................

DATE...........................................

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**Remark:**
- Comes to me and asks me things
- Played with a puzzle, enjoyed it
- Came and showed me what he had done
- Didn’t come to me unless I ask him to
- Came and had a game with Neal & me
- Seemed a lot happier
- Played with us all and was happy
Case 8
Jason H
(aged 3 years 6 months)
birth weight 6lbs 12oz

Reason for referral:
Jason was admitted to hospital for failure to thrive and developmental retardation. Medical investigation excluded any possible organic reason for his poor growth and development. He was referred to me for psychosocial assessment and treatment.

Family Composition:

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<tr>
<td>Mother: 21: housewife</td>
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<tr>
<td>Jason 3 years, 6 months, At Home</td>
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<td>Linda 2 years,          At Home</td>
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Living Conditions:
The family live in a three bedroomed new council house which is centrally heated. The house is sparsely furnished but reasonably clean.

Financial Situation:
The family lives on supplementary benefit and family allowance and just about manage. There are no debts or arrears. Financial restrictions often lead to some quarrels between the parents and some hardship.

Family Background:
Mr. H and Miss B have been living together for four years. Mr. H is the father of both children. It was decided that one child should carry the surname of each parent. The family unit contains a complex pattern of inter-personal relationships and somewhat unusual pattern of functioning. The couple seem to go their own separate ways with both partners having other friends. Mr. H has had another girlfriend throughout their period together, Miss B being aware of this relationship. On one hand she does not object to it and on the other she wants to have a secure relationship. Mr. H does not play an active role as a father, leaving all the
responsibilities to Miss B.

Father's Background:

Mr. H. comes from a problem working-class family of three children. He refers to his childhood with bitter memories. His father was a punitive man often violent towards his wife and children. Mr. H school attendance and performance was poor. He was truanting persistently and at the age of 15, appeared in Court for non-attendance at school and vandalism and was subsequently put on a probation supervision order for three years. After leaving school he worked in various places for about two years, each employment lasting only a few weeks. Since meeting Miss B he has not been working on a permanent basis occasionally doing odd jobs. About five years ago he joined a gang of "Hell's Angels" and has been involved in their activities since. He spends almost no time at all with his children and limited time with Miss B. He treats home as a base to come to and to repair his and his gang-mates motorbikes.

Mother's Background:

Miss B comes from a working-class family of five children. When she was three years old her parents separated and she was placed in a Foster Home with one of her sisters. She stayed there until she was sixteen. Miss B was not happy in the Foster Home, which was situated in a small village. She spent considerable time strolling into the city for entertainment. She became pregnant at sixteen and left the care of her foster parents. She went to a Mother/Baby Home and spent three months there. After Jason was born she went to another Mother/Baby Hostel, staying there for six months. During that time Jason was placed in two separate foster homes. Miss B felt very depressed because of separation from Mr H, therefore, she was moved to the Homeless Unit and reunited with father and son. They stayed there for a year. Finally the family was allocated their present council house and have been living there ever since. Miss B's school achievements were good. She got 6 'O' levels and started training as a G.P.O. telephonist. Miss B has not got any contact with her parents or siblings but remains in casual contact with the foster parents.
The Child:

Pregnancy:

Good pregnancy physically no complications. Mother was under considerable stress because of homelessness.

Birth:

Jason was born two weeks overdue. A straightforward labour and delivery. Birth weight: 6lbs 12oz.

FEEDING:

Little is known about early feeding as Jason spent 6 months in two different foster homes. On the occasions when mother visited and fed Jason, she reports that he fed slowly and took him a while to get used to solids. He occasionally vomited and had diarrhoea. He never indicated hunger, never asked for food but would eat when food was given. Presently he eats well but the regularity and quality of food is poor.

Development:

Motor:

Jason sat at eleven months and walked at 2 years, 2 months. His movements were slow and lethargic.

Language:

Jason's language development shows serious retardation. First words heard (two or three) at two-and-a-half. Presently at three-and-a-half his vocabulary increased to about 15 words, but does not use sentences. He communicates by pointing at thing he wants and vocalising in an indistinctive way.

Social Development:

Jason has limited contact with his peers, he does not join in with other children's activities, neither does he know how to play and participate in the play. With adults he is shy and does not approach them easily. His individual play lacks concentration and purpose. Training of social skills
like; eating; toileting and sharing, is very limited.

Toilet Training:

Jason is not toilet trained at all. No regular attempt is made to do so. Mother feels that it is too much hassle to make him sit on the potty.

Child's Temperamental characteristics:

Jason tends to be of a low activity level, average adaptability, low on biological functioning, (like sleeping, waking up, feeling hungry, bowel movement,) which makes basic care of him difficult. He has a high tendency to withdraw rather than approach eg( new people, places, experiences, etc.,) and he is variable on moods. He would come into the 'slow to warm up' category of temperamental characteristics.

Mother/Child interaction:

Interaction is of poor quality. She seldom plays or talks to Jason and she gets irritated when he follows her around. Since there are very few toys at home, he spends most of the time standing or sitting detached and withdrawn. Out of boredom he tares the wallpaper or damages the furniture. Mother in turn gets angry and smacks him for it. When the weather is good, he wanders about in the garden with his sister, usually getting into mischief.

Mother/Child Relationships:

Mother is quite concerned about Jason's poor development and small stature. She loves him in her own way and tries her best within her limited knowledge to bring him up. Jason relates to her well, comes to her for cuddles and she responds to it. He does not show any inhibitions to approach her. She wants to keep Jason with her but realises and feels that she needs some help.

Father/Child Interaction:

Father has nothing to do with Jason. He does not help with regular care and virtually does not take any notice of him. Jason does not come near him and appears to be frightened when he is around. When he misbehaves he shouts at him, which appears to be the only interaction with Jason.
Father/Child Relationship:

Father's feelings towards Jason are indifferent if not hostile. He gets little pleasure from a boy who does not communicate, is not vivacious and boisterous. Jason avoids him and does not feel at ease in his presence.

Observations of child in hospital:

Jason settle reasonably well after admission to hospital. His behaviour was erratic. He did not know how to play with the toys and often disrupted other children's play or activities. Being unable to communicate and make himself understood, frustrated him. He would react in two different ways: a) burst into tears and then become withdrawn or b) get angry and frantically run about. However when on his own he would sit rather detached, looking at toys and attempting to play. He was always pleased to see his mother and played with her, bringing all the toys. Jason appeared to be upset when mother was leaving, but was easily distracted.

Observations of child at home:

Routine and child care at home is poor and there is serious lack of stimulation. Jason did not have any breakfast up to 10.30 a.m. was running about undressed, smelly and dirty. There were no toys or anything else that he could occupy himself with. His eating skills are on a 2 years old level. Mother did not make any attempt to wash and dress him. His behaviour is very much on the deficit side, he sits or stands on one spot staring blankly at people or objects or picks up bits and pieces from the floor. When father arrived home, he did not look at him or say anything. Jason remained rooted at the same spot doing nothing. Subsequent observations and discussions with mother revealed sleeping problems in terms of nightmares and inability to settle down in bed.

Functional Analysis:

Will consist of three target behaviours: withdrawal, sleeping and eating.
Target behaviour 1

Withdrawal:

Antecedent:
Withdrawal occurs mostly at home at any time of the day and can persist for long periods of time and at time all day. Prolonged periods occur when father is present. He is more alert when in shops or any other public places.

Behaviour:
Jason sits or stands in one place staring blankly. His face is expressionless and he seldom smiles. When he walks, his movements are slow and lethargic. When pressed to do something he bursts into tears.

Consequences:
Mother does not do anything about it. She leaves him as he is, unless he does something naughty like damaging the furniture or scribbling on the walls etc.,

Target behaviour 2

Sleeping:

Antecedent:
Jason cannot settle down in bed, or to go to sleep. Mother mostly picks him up and puts him to bed, occasionally a babysitter will have the same trouble, it makes no difference who puts him to bed. When he falls asleep downstairs and then taken upstairs, he sleeps better. There is no routine in going to bed.

Behaviour:
Jason refuses to go to bed. Once in bed, he cries and then comes down, when taken back, he cries for long periods of time. During the night he has nightmares 4-5 times a week. He also strips the bed or pulls off the paper from the walls.
Consequences:

Mother feels that the evenings should be free of children. Therefore, she reacts to presenting problem with annoyance and at times with anger. She shouts at him or smacks him and seldom attends to him to check whether he is alright.

Target behaviour 3

Eating:

Eating is analysed not in terms of feeding difficulties, but in terms of provision of food and eating no food items.

Antecedent:

Jason does not indicate hunger, never asks for food. Once the food is given he will eat well and eats everything. There are no set times for meals, and he seldom has a proper well cooked meal. He gets up at 8 a.m. but breakfast is given between 10 and 11 a.m. (usually cereal). Lunch consists of sandwiches at whenever mother feels is a right time, and dinner sometimes during the evening consists of sausages and potatoes, beans on toast, soup etc. He also eats dirt, soil, paper etc.,

Behaviour:

Jason eats well, using hands and spoon. He usually sits on the floor with a plate. He is not fussy and appears to like everything. When food falls to the floor, he picks it up and eats it. He does not ask for more, but eats it hungrily and fast.

Consequences:

Mother lacks routine in meal setting and imagination what to cook within her financial limits. She does not teach the children eating skills and table manners. The meals are provided when she is ready for it, not when the children need it. Jason I feel, is often hungry, looking at the way he eats.

Clinical Formulation:

It is hypothesize that: Jason's poor growth and retarded development are
the results of a) social, b) historical, c) psychological factors.

1. Jason was born into considerable social stress (homelessness, financial difficulties, mother's social isolation and lack of support).

Due to the above difficulties, mother became acutely depressed and was unable to care for baby, so he was fostered out twice, separation lasting five months, as they moved six times during the first 2 1/2 years.

2. Mother was sixteen when she had Jason and no idea about the needs and care of children. She had also no-one to support and help her.

3. His developmental retardation seems to be the result of serious and prolonged lack of stimulation and meaningful interaction.

4. Poor mothering and somewhat unclear relationship stems from mother's deprived background. She has been rejected by the parents and spent most of her life in foster care, where she was not happy. There are also elements of non-purposeful neglect, like poor child hygiene and irregular provision of food. Lack of social skills is the result of poor socialisation and lack of discrimination training.

5. Finally, father's negative reactions to Jason, repressed his development even further.

TREATMENT PROGRAMME

1. Structuring and improving child care

  a) meals are to be prepared and given at proper time:-
     8.30 a.m. 1.00 p.m. 5.30 p.m.
  b) Jason must be washed each day and dressed in clean clothing.
  c) He is to be changed when wet or dirty.

2. Providing stimulation - Reducing Withdrawal

  a) Jason is to attend Day Nursery regularly three full days.
  b) Mother goes with him and spends at least two hours each day observing nursery staff at work and joining in.
3. **Improving mother-child interaction**

a) Mother is to play with Jason, talk to him and teach him new words by looking at a picture book - each day for half an hour (toys will be provided).

b) Mother is to encourage Jason to join her when she is cleaning, or preparing food, explaining what she is doing.

c) Mother's manner and the way she talks to him must be calm, warm and patient.

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**Developmental Counselling**

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4. **Teaching social skills:**

a) *Toilet Training:* Jason is to use potty on a regular basis. Sit him on the potty every two hours. Praise him when he does something, give him a biscuit for being a good boy, make a lot of fuss (star chart).

b) *Eating Skills:* You need to teach Jason how to use a spoon and fork. Show him how to hold them, help him, praise him for each good attempt (modelling will be provided).

c) *Dressing and undressing:* Encourage and supervise Jason dressing and undressing himself. He will have a lot of difficulty to start with - be patient. (modelling will be provided).

---

5. **Teaching Mother and Child to play:**

a) "Home Start" will be introduced to the family to teach mother and child to play together and to give support.

b) "Home Start" will also help the mother to plan a menu and advise her on shopping.

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6. **Sleeping:**

a) Get Jason ready for bed.

b) Put him to bed, cuddle him for a few minutes and read him a story.

c) Leave the night light on, so that he is not frightened.

d) Kiss him goodnight and leave the room.

e) Make sure that he is comfortable.
f) If Jason comes down - take him back to bed and tell him firmly that he must stay in bed.

g) Whenever Jason has a nightmare, comfort him, stay with him for a while, reassure him.

Remark

1. This programme is worked out for mother only. Father would not participate although promised not to interfere and at least indirectly support the mother.

2. My attempt to do "couple therapy" was not accepted as they both felt that they are alright as they are, something that they agreed on a long time ago.
Name: Jason

BOYS

Weight

Age, years

Date of Birth

Reg. No.

Single-Time  97
Standard  50
(cross-sectional)  3
Case 11
Geraldine C.
d.o.b. 1/5/1976
birth weight 6lbs 5oz.
Age at time of referral: 2 years.

Reason for Referral:
Geraldine was admitted to hospital on 20/6/78 for Failure to Thrive. At the time of referral she was grossly underweight and her general development was retarded. She hardly ate anything and the parents thought that she was going to die.

Family Composition:

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<tbody>
<tr>
<td>Father</td>
<td>32 years</td>
<td>Teacher</td>
</tr>
<tr>
<td>Mother</td>
<td>32 years</td>
<td>Teacher Part-time</td>
</tr>
<tr>
<td>Peter</td>
<td>5 years</td>
<td>Infant School</td>
</tr>
<tr>
<td>Geraldine</td>
<td>2 years</td>
<td>In Hospital</td>
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Living Conditions:
The family live in a pleasant detached house in a residential area. The house is well furnished, clean and material standards are high.

Financial Situation:
The financial situation appears to be satisfactory. They are all well dressed, the house is well equipped and the children are well provided for.

Family Background:
Mr. & Mrs. C. were married nine years ago and settled down in Leicester. For the first four years they were both working as teachers. When Peter was born the mother was working two evenings a week at the Adult Education Centre. The father is a French Language Teacher and teaches at the High School. The marriage appears to be reasonably stable. There has been however quite a lot of tension and hard feelings since Geraldine was born. Because of excessive demands and difficulties that she has been presenting over her rearing, father became somewhat detached from the child. Consequently Mrs. C was left alone to cope with Geraldine. She denies any serious disharmony or lack of support from her husband.
Mother's Background:

Mrs. C. comes from a middle class family. Both parents were teachers. Her mother died when she was a baby. Her father remarried soon after. The relationship with the step-mother has always been good. Mrs. C. was trained at the Teacher Training College where she met her husband. She maintained close contact with her family and they seemed to be supportive and helpful.

Father's Background:

Mr. C. comes from a working class family of six children. His family has always been a close one. After his training he came to teach in Leicester. Mr. C. teaches French language. He keeps in close contact with his family. Their relationship seems to be a good one.

The Child:

It was a very good pregnancy with no difficulties:

Birth:

Geraldine was born at full term without any complications, no breathing difficulties and weighing 6lbs.5ozs.

Feeding History:

Geraldine was breast fed in hospital. She never cried with hunger. She slept most of the time and had to be wakened for feeding. She would suck a little for three to four minutes and the nurses tried to keep her awake but it would not do much good. She vomited what she had taken after 15-20 minutes later, not immediately afterwards.

After coming home the midwife came three times. She was still being breast fed. Each feed was difficult, she moved, refused to suck but took some feeds. Again she had not indicated hunger and the sickness continued. When taken to the baby clinic it was found that she was not gaining any weight. She stayed at the same level about 7lbs. Because of failure to gain weight and feeding difficulties she was referred to the Paediatric Assessment Centre, and was seen there at seven weeks of age. She was admitted to hospital, Ward C.H.I., and stayed there for two weeks. Mother was breast feeding her there every four hours. She did not improve and continued to vomit between feeds. She was then put on to bottle feeds. It took a long time to make her take half of the milk required and then she would bring it back immediately. All the tests were done and they found Haines Hernia. So she had to be kept in a sitting position until she was two years old. She gained weight in hospital. After coming home she was eating better for two or three weeks and she was gaining weight. A month later she vomited fluid which looked like blood and this would occur from time to time. Feeding continued to be a long process and vomiting frequently, usually when she took a little more milk. When she was four and a half months old mother introduced solids. She refused to take it. She would spit it out or would vomit or just clasp her lips and turn her head away. She had gained little weight. She practically did not take any solids or very little but would take a little milk. She seemed to be in pain when she took more and would vomit. This continued until she was two years old and came to hospital for an operation.

When Geraldine was sixteen months old the family went to France for seven months. Feeding there had the same pattern. She was in a nursery and took some feeds there.
The nurse came and fed her at home. She would take from the nurse a little more and would open her mouth wider. There was a little improvement and the weight was up and down. She had frequent colds and infections and at that time she would lose weight. She had a good spell of eating just before the operation. Her weight increased up to 9 kgs. At the age of two years she had an operation for Hernia. After the operation she fed reasonably well for about two weeks. When the family returned to France after the operation, (she was two years old) she stopped eating altogether. She was heaving whenever she took anything into her mouth. It went on for a week and mother decided to come back to England and was seen by a surgeon. Geraldine was admitted to hospital again. It was established then, that there was nothing wrong with the child physically. All tests were carried out and it was established that the failure to thrive had no organic reason.

Development:

Motor:
On a motor level Geraldine sat at 8 months, crawled at 16 months and walked at 20 months. From 8 months onwards she seemed to slow down in movements.

Language:
Geraldine was a very late developer in language. First words were heard at 21 months but only two or three. Just recently at two years six months she has begun to speak more and also joins two or three words together. She responded to requests at early stages.

Social:
Geraldine's social development is poor. She appears to be lethargic and totally detached. She seldom approaches other children or adults. She does not join in any activities or play. She usually sits in a cot or in a chair staring blankly at people or objects, she also does not show any interest in toys.

Toilet Training:
Geraldine is not fully toilet trained, her bowel control is reasonably good but, wetting occurs during the day and night.

Sleeping:
Geraldine sleeps more than an average child for her age. She sleeps all night and two long periods during the day.

Geraldine's Temperamental Characteristics:
Geraldine is low on activity, variable in rhythmisity, which makes basic care of her rather difficult. She has a high threshold of responsiveness, which means, she is not a very sensitive child, (pain, illness) She has a high tendency to withdraw rather than approach,( eg. new people, places, experiences etc.,) but is mild in moods. She would come into the 'Slow to warm up' category.
Relationship with Mother and Interaction:
Relationship with mother is very good. She has been spending much time with Geraldine, talking, playing, and generally stimulating her. All the regular care has been provided mainly by the mother. Mother is a very anxious person, extremely worried about her. Attachment and commitment to Geraldine is very strong.

Relationship with Father and Interaction:
Due to the extreme difficulties with Geraldine the father-child relationship has somewhat deteriorated. He feels that she does not want him or respond to him and therefore he does not see much point in trying. He has said that he 'washed his hands of her' a long time ago. He does not visit her on a regular basis. Little attachment observed. Father gave up hope on her survival.

Sibling-Child Interaction:
Geraldine's interaction with her brother is limited, but not indifferent. He tries to play with her, but having little response he gives up easily.

Assessment:
Discussion with both parents in Hospital:
I met both parents a few days after Geraldine was admitted to hospital for failure to thrive in June. Both parents but especially the mother were extremely worried and depressed. The mother kept talking about death as she had little hope for her daughter's improvement. She had obviously reached the point where she could no longer cope physically and emotionally. The father was rather philosophical about it. He was intellectualising most of the events. When I stressed the point that Geraldine's feeding pattern might have nothing to do with mother's mishandling but rather with the child's temperament and illness, Mrs. C. burst into tears with relief. I felt that Mr. C. blamed his wife for Geraldine's poor feeding. Nevertheless they were prepared to do whatever they were asked to do.

Subsequent Discussion:
I have been seeing Mrs. C. very frequently on the ward or in my office. As Geraldine has become better Mrs. C. has become more relaxed and less anxious. She spends hours each day in hospital with Geraldine and is always very pleasant and open to advice. I have not seen much of Mr. C. as he visited during the evenings or at week-ends. (very seldom)

Observation of Child in Hospital:
When first admitted to hospital ward C.H.2. Geraldine was grossly wasted and developmentally retarded. She slept a lot and when awakened she sat in her cot looking blankly not moving. I rarely saw her smiling but, with a totally expressionless face and lethargic movement. She did not respond to nurses or to anything going on around her. I hardly heard any recognisable sound from her. After three or four weeks she began to walk around the ward more and outside with her mother. She also began to say a few words, some in English and some in French. Gradually as she became physically stronger she also became more active playing with toys. She ate very little and usually when no attention was given. As soon as someone made a remark about her eating or just looked at her, she would promptly stop eating.
Observation of the Child at Home:

During the last five months Geraldine spent only one week at home still being tube fed, so I have had no opportunity to see her eating normally. She was quite happy and adjusted to home routine very well. It was difficult to assess her eating performance both in hospital and at home because of the tube feeding. It was impossible to estimate how much she could eat taking into account that she was given required calories artificially. Things began to go wrong after three days. Each tube feed was followed by diarrhoea and vomiting. At dinner time whilst I was present she actually did not touch the food and refused to open her mouth when mother tried to feed her. She was quite happy though and alert. There was tremendous tension and Mr. G. directed his anger towards me. Mrs. C. was very tense and totally demoralised not knowing what to do next. She felt very inadequate as a mother and broke down crying bitterly. There was no response or attempt from Mr. G. to comfort his wife. He left the room and went upstairs. While I was there Geraldine vomited seven minutes after tube feeding and twenty minutes later accompanied by diarrhoea.

Observation of the Child on C.H.I.

Geraldine was vomiting after each tube feed. It seemed to be a voluntary vomiting and she deliberately made herself vomit. She hardly ate anything. Nurses, dinner ladies and mother and other mothers were prompting her, making much fuss but this made her even more determined not to eat. During her stay on C.H.I. her language, activity and sociability increased and she began to talk and mix with other children and joined in other activities building relationships with the staff. She easily approached other people like other parents and she became alert and responsive. Developmentally she made a considerable step forward. Because she had reached the target in her weight, it was decided to start feeding routine before the tube would be taken away, thus providing re-training and reconditioning.

History of Hospitalisation:

Geraldine was admitted to hospital on 20/07/78. She was grossly wasted, weighing 8kgs. She appeared to be lethargic, detached and withdrawn. She was totally irresponsible. She slept a lot, far more than any child of her age. She would not take any food. Tube feeds were introduced and she began to gain weight systematically. She was vomiting only occasionally. At the same time ordinary dinners were given but she ate very little, 2-3 mouthfuls, some crisps or cakes. She seemed to eat better and more when no attention was given. Any kind of persistence had a stubborn effect. She would not open her mouth and would refuse to eat. Mother was always present at feeding time and in fact she used to spend most of the time with her in hospital. Gradually Geraldine became more alert, playing more and joining other children. Her language improved a little. She began to speak more in isolated words but not sentences. When Geraldine reached 10kgs, 600gms, after two and a half months of hospitalisation, she was discharged home with a tube and Mrs. C. learned how to tube feed her. The first three days at home went reasonably well. She ate a little and the tube feeding went well. On the fourth day she vomited immediately after being tube fed and then developed diarrhoea. She was losing weight rapidly and a week later she was readmitted to hospital. For the first few days vomiting and diarrhoea continued. The tube feeds were given at night time. Geraldine settled down well in hospital. Her ordinary feeding however did not improve. She hardly touched the food and it seemed that she developed an aversion to food and simply lost the eating habit. It was decided then that when she would reach a reasonable weight the tube would be taken out and eating training would begin.
Functional Analysis:
The major problem to analyse was eating but more specifically strong food avoidance behaviour, (food aversion).

Eating:

Antecedents Events:
Geraldine ate better in other places than at home. She would take better feeds from other people rather than family. She would also take feeds better away from home. She never indicated hunger. Time of the day did not make any difference. If she was in an eating mood she would eat set meals or cakes, crisps etc.,

Behaviour:
She would turn her head away and would not open her mouth. She spat out or vomited. When she was forced to eat she would scream and would make herself sick.

Consequences:
Mother and father attempted to force her, especially the father. Occasionally he slapped her hand and insisted that she ate. Mother was very worried and anxious all the time. Mother would cry when she totally refused to eat. Father tended to show more anger towards the child. Mother persisted and became angry but also gave up at the end of the battle. She tried to distract her but even this did not work.
Eating Analysis (2)

Training Programme:

Primary Drive $\rightarrow$ Hunger $\rightarrow$ Blunted $\rightarrow$ Tube Feed $\rightarrow$ Remove it

Secondary Drive $\rightarrow$ Appetite $\rightarrow$ Disruptive Emotions $\rightarrow$ Routine $\rightarrow$ Is there one? (Mother, other children, nurses, ward activities + distraction)

Conditioned Anxiety/disgust? Learned aversion avoidance

Instrumental: Knowing how to eat associating eating with her own table place, time of day etc., etc.

Being able to swallow and hold down food without nausea.

... * * * * * *

ANALYSIS (Anxiety)
(Disgust)
(Conditioned avoidance/aversion)

Eat $\rightarrow$ Hunger Drive $\rightarrow$ Appetite $\rightarrow$ Like certain foods $\rightarrow$

Approach response to food $\rightarrow$ Routine (stimulus rather than avoidance to food $\rightarrow$) instrumental acts (swallow hold down food) $\rightarrow$ enjoy it (reward eating is rewarding) $\rightarrow$

feedback from palate (well-being/tasty)

HABIT TRAINING

? De-conditioning of avoidance behaviour (aversion)
Clinical Formulation:

It is very difficult to formulate this case as I have not seen Geraldine's eating behaviour and the way it was carried out, and managed at home and hospital prior to tube feeding. Tube feeding prevented me from making rational and realistic assessment. The base line on eating showed 'eat nothing' during two week period. Taking that required nourishment (calories) were given by tube, how much should I have expected her to take by mouth? Long history of low hunger drive was now blunted by tube feeding. Gradual reduction of tube feeding didn't stimulate her appetite or hunger drive. After two and a half months of being tube fed, she completely lost eating habit. Instrumental learning diminished. She did not know how to eat, what to do with food, how to swallow and chew. Instead she would play with food e.g. (puts yogourt on her hair and shampoo’s it.)

Looking at the distal antecedents it became more clear how the food avoidance behaviour was learned and conditioned.

1) Geraldine was difficult to feed from very early on, these difficulties increased when solids were introduced. She was undernourished falling below expected weight and developmental norms. Mother's attempts to get professional advice and concrete help were met with criticism. She didn't get much help or support from her husband. Feeling that it was her mismanagement, she was determined to succeed. She started force-feeding Geraldine. The child would cry, scream and vomit and would resist to open her mouth and swallow. Mother would get angry and scream at the child, or would burst helplessly into tears. Mother was in a constant state of anxiety, desperate and helpless.

2) At the age of two years Geraldine was operated on for Hiatus Hernia. The operation did not seem to resolve feeding problems, instead Geraldine lost more weight and took less food and eventually after an acute battle she stopped taking feeds altogether. Mother was determined to 'feed her up', forcing her to eat, getting angry and very frustrated. Geraldine would start screaming and throwing her arms about at the sight of food dish and mother approaching her. Eventually at the time of admission to hospital anxiety generalised itself to everything and every connected with feeding. Feeding became adversive conditioned stimulus, provoking anxiety and resulting in food aversion.

In short, the "why" question can be answered as follows:-

1) Learned avoidance and aversion of food partly due to the physical discomfort because of Hiatus Hernia prior to operation also due to long standing pressure on Geraldine to eat.

2) Mother's determination to 'feed her up' in a short period of time after the operation, expecting her to eat far more than she could.

3) Mother's high anxiety level which continued over a long period of time at feeding time, brought irrational reactions and expectations. Variety of criticism regarding child management, endless struggle led to feelings of helplessness and hopelessness.

4) Lack of constructive advice and practical help as to how to deal with acute feeding difficulties. Uncertainty and confusion coming from hospital staff and G.P. practice.
The pressure that had been connected with feeding conditioned anxiety and disgust to food. Geraldine developed food aversion by associating eating with painful and unpleasant experiences.

Delayed development and withdrawn lethargic behaviour is a result of long going starvation due to physical conditions (Hiatus Hernia) and mothers preoccupation with Geraldine's physical condition (obviously her life was at stake) at times overlooking her emotional needs. The mother had little support and help from the father, carrying the burden almost entirely on her own.

Treatment Programme for Geraldine in Hospital:

Changing Stimulus Control:

1) Feeding should take place on the balcony from now on, a little earlier, before other children start eating. Mother should not be present during eating time. Geraldine should be fed and supervised by a calm and patient nurse, (whenever possible the same one.)

2) Learning by Observation - Modelling:

For modelling purposes Geraldine should be eating with one or two children with good appetites. We want her to observe how they are eating. Nurse should make remarks like; Is it nice? Do you enjoy it? 'O' you have done well, look Geraldine how quickly he finished it.

3) Desensitisation:

The nurse who supervises the eating training, should be relaxed, calm, encouraging Geraldine to eat, in a quiet pleasant way. Under no circumstances should she force Geraldine to eat or to get angry with her, because she is refusing to eat. If possible nurse should have her dinner with Geraldine, describing what she is doing like; - I take the spoon to my mouth, I chew it like this and swallow it, now another spoon, etc.,

4) Reinforcement:

Food should be presented in an appetising way in small quantities and what she likes best. (List of food liked is available and our dietitian will organise menus.)

5) She should be praised and given a lot of attention and encouragement when she attempts to eat.

6) Prompting and Shaping:

Prompt her occasionally in a casual way. Do not rush her or force her to eat. Be patient and satisfied with minimal improvements in reaction to food and then actual eating. She should sit at the table for 15-20 minutes.
Geraldine:

Programme for Mother:

1) **Reducing Anxiety:**

   Relaxation exercises to be done twice daily and at the time when you feel particularly tense.

2) **Thought Stopping:**

   Obsessional thoughts about Geraldine dying. When you think about Geraldine in such a black way, you must order yourself to stop. Concentrate on, think loudly about the things you are doing. When you cannot stop, bang your hand to the point of pain, this will stop the trend of thoughts. Switch your mind to something pleasant, (imagine something which brings pleasant memories).

3) **Counselling weekly sessions with the mother.**

4) **Feeding time at home and in the hospital:**

   After Geraldine's initial eating training, you should join her during lunch or tea on the balcony. Later you should supervise her when eating is taking place on the ward with other children.

**IMPORTANT:**

STAY CALM, DO NOT HURRY HER, DO NOT GET UPSET AND ANXIOUS BECAUSE SHE HAS NOT DONE WELL.

Home:

When Geraldine returns home, observe these principles.

Mother-Child Interaction and Family Interaction:

Handle Geraldine kindly but firmly, this will be difficult for you to do as you now feel just grateful that she is alive and well. Geraldine is quite stubborn and strong-minded so firmness is essential to maintain the achieved behaviour.

Help Geraldine to catch up on her language development, by talking to her, reading, encouraging her to play with other children. Teach her to answer questions.

Encourage father to play with her as well as with Peter. They became very detached while she was in hospital.
Number of Times After Being Discharged Home (within Treffertet)

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Rating Scale

1. None
2. Little
3. Moderate
4. Severe
5. Very Severe
6. Extremely Severe

Graph showing variations in the number of times after being discharged home.
"I think that, on reflection, two points emerge dominating my thoughts on this subject. Firstly, one thing that has helped me preserve a few shreds of sanity in all this, is that Geraldine is the second child. Having produced one normal physical specimen has been a great consolation.

Secondly, the worry and concern over Geraldine can best be described as an obsession. It has completely dominated my thoughts, pushing out everything else as commonplace. It has overruled all attempts to remove it, even temporarily, in work or social activity. Worries about Geraldine have come worming their way into my mind at the most unlikely moments, making everything else seem trivial in comparison. I cannot stress this point strongly enough, although of course this might be entirely my attitude to all this, and other people hopefully might not feel it so painfully as I have done.

The agony of worrying over Geraldine is definitely felt physically. It can best be described as a tight tugging around the ribs which becomes more or less vice-like according to the degree of worry.

Mixed up in this, and not helping the situation, are guilt feelings. When overcome with anxiety, I attempted to remind myself of the far worse afflictions which some children have, and therefore I should not be in such a state over Geraldine, but that has probably made me worse, as I have felt so wicked and wrong to be self-pitying, and so seemed to have created a vicious circle. I hope I make myself comprehensible on this point.

I think also I have created a state of anxiety myself as an "insurance policy" if she should die, so that it would not be such a shock, as it would be if I was more relaxed. This fear has haunted me all along. In fact to the extent of not writing her name on the Christmas cards until the last moment, during her first year. I kept hoping that if she should die that it would happen sooner rather than later, because of the increasing attachment, but now I feel that the longer she does survive, the better chance she has of survival. This anxiety might appear out of proportion to the case, but that is how I have felt.

A more detached, but interesting observation I have made is that of people's attitudes to us. I have been lucky enough to have a few friends close at hand on whom one could call at any time and talk freely, which has been a great help. There are also people who enquire frequently about Geraldine with the best of intentions, but who keep saying "I don't know how you keep going", or "what a worry it must be for you" etc., and in fact probably increase my anxieties, and there are some people with morbid curiosities, who enjoy the "gory details", and others if to whom one says anything more than "everything about the same" etc., their eyes glaze over as they are not really interested at all. I am sure it is easy to become a bore on the subject of Geraldine, and I have made great efforts to avoid discussing her when out socially, but I think I am probably just as big a bore as I feel I lack much to offer to the general conversations, not having had the freedom of brain (because of Geraldine) to give much thought in depth to other matters.

Sometimes although I have managed to avoid voicing my opinion, on listening to other mothers moaning about their children, I have felt bitter that they have nothing more serious to go on about but seemingly trivial matters,
But then I feel guilty about that, as I do realise that worries are only relative, and already I feel myself lapsing into a similar state.

However, I have found that people's more serious troubles now affect me more and make me more sad than previously, and I feel for them more strongly, which I presume is a good thing, and without wishing to appear self-righteous, I hope the experience has made me a better person and hopefully more able to cope with any other ordeal that life might bring.

As an afterthought, I have attempted to cast my mind back to when Geraldine was less than a year old, and the times between hospital appointments seemed endless, and there was no-one to appreciate the day to day difficulties, because when I was referred to the hospital when Geraldine was two months old, all contact with the local clinic seemed to cease. I received no help from the Health visitor, and it was not until we went to France that I received any practical help, which was when the clinic nurse came to attempt to give Geraldine her lunch, and the doctor suggested that she should join the other children for afternoon tea.

Mother's Views after Treatment:

Looking back now that Geraldine has fully recovered and a normal active five year old, it almost seems like a distant nightmare. However having said that, it does not take too much reflection to being back painfully clear the agonising details of the time, although it is now only certain details which stand out and can never be erased from memory.

Once Geraldine was admitted to hospital, the care and attention was wonderful and the support given was of tremendous value. This continued after her return home and was gradually eased off until it was felt time to continue alone. This was also the case with the medical side of things. At first the Out Patient's appointments were frequent, gradually lessening off as it became clear she was recovering to complete health. The doctors told me I was free to contact them at any time and to take Geraldine to see them without waiting for an appointment, if I had any worries at all. This was a great comfort to me although fortunately I never had to resort to this.

Friends and neighbours who have known her from birth describe her as a 'walking miracle' and many say they never thought that they would see her as she is now. People who have only recently met her, if told about her previous history find it extremely difficult to believe, and cannot imagine her as ever having been any different in health than she is now.