

UNIVERSITY OF LONDON INSTITUTE OF EDUCATION

MOTHERS' AND TEACHERS' PERCEPTIONS OF SOCIAL AND INDEPENDENCE  
SKILLS IN ADOLESCENTS WITH MODERATE LEARNING DIFFICULTIES

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degree of PhD

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ABSTRACTJUDITH MIDDLETON

Parents as partners was one of the cornerstones of the 1981 Education Act, emphasizing the importance of parental views and involvement in the education of children with special needs. Recent research suggests that mothers and teachers may disagree over the social and independence skills of handicapped children, although the direction of the disagreement is equivocal. The present study looked at 19 young adolescents (12 - 15 years) with moderate learning difficulties and 18 normal adolescents from a total of 7 Inner London schools. The aim of the study was to look at mothers' and teachers' perceptions of these children and see how their perceptions related to children's interactions with mothers and teachers.

The children were observed in their classrooms with their teachers and at home with their mothers for an hour. Subsequently mothers and teachers completed a questionnaire relating to specific social and independence skills of these children. Finally a repertory grid was used to explore the frame of reference mothers and teachers used when judging children as socially mature.

Results showed that there was little relationship between the way either set of children behaved at home and at school. Interactions between children with moderate learning difficulties and adults tended to be characterised by control and resistance; those between normal children and adults by care, initiation and acceptance. Although the two groups of children did not behave differently at school, teachers behaved differently towards the two groups.

There was very little agreement between mothers' and teachers' ratings of both groups of children in specific social and independence skills. Both mothers and teachers rated children with moderate learning difficulties as less competent than normal children in a number of areas, generally those where there might be an element of danger or where the skill was complex.

Despite construing social maturity in the same way, mothers and teachers rated children with moderate learning difficulties differently, with mothers seeing them as more mature. Yet when compared with normal children, mothers rated their handicapped children as immature. Teachers rated children with moderate learning difficulties as immature.

Additional analysis showed that certain constructs had very different implications for mothers and teachers, which might explain their lack of agreement.

The results are discussed in terms of the importance of a shared understanding of this group of children, particularly in view of the increasingly important role of parents in the process of education of children with special needs.

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1. INTRODUCTION and BACKGROUND

Antoine de Saint-Exupery's 'The Little Prince' (1945) illustrates two themes which will run throughout this thesis. Firstly, at whatever level, our perceptions are to some extent based on prior knowledge. Secondly, our perception of something will affect the kinds of questions we ask about it, and make other questions quite unintelligible.

The focus of this thesis is the way mothers and teachers perceive young adolescents with moderate learning difficulties, here called Educationally Subnormal (Mild) (ESN (M)), as the pupils in the study came from schools designated ESN (M) at the time of data collection. With equal emphasis, the thesis also focuses on pupils' behaviour at home and at school, and how this relates to mothers' and teachers' perceptions. Consideration of the interaction between ESN (M) pupils' behaviour and their mothers' and teachers' perceptions of them is important at the present time, particularly when parents have been given greater opportunities to be involved in their children's education by the 1981 Education Act.

This chapter will look briefly at the social context of disability and the educational background. It will focus on the changing attitudes towards the disabled, the difficulties of labelling and classification of ESN (M) pupils, and the change in their education over the past 100 years. These factors are relevant when examining the role of parents as partners.

The Literature Review will consider in detail research into parents' and teachers' perceptions of children with mental handicaps, both as separate groups and comparatively.

1.1 The social context of disability

The position of ESN (M) children within society is usefully seen against the wider issues relating to attitudes towards the individual and society. R.L. Jones (1974) proposed a hierarchy of attitudes towards the handicapped. The way we perceive ESN (M) pupils

is influenced (among other things) by our attitudes towards the disabled as a group, and by our understanding of and attitudes towards deviancy and normality. In turn, the parameters of normality are related to our cultural mores, and to an extent this will depend on attitudes towards the balance between individual and societal power, political and economic influence.

Individuals may hold differing attitudes at any stage in this hierarchy. This is particularly pertinent when looking at the way ESN (M) pupils are perceived by their mothers and teachers. What is considered deviant by one may be seen as normal by another, and is directly related to the society in which we live. As will be seen later, this group of pupils are particularly difficult to classify. The criteria for normality and deviancy essentially point to what is deemed acceptable or unacceptable; and this varies over time, between different social groups and individuals. In addition, the attitudes of the individual and those of society or authority towards deviancy can differ, and may conflict.

Rowitz (1974) discussed the perspectives of primary and secondary deviation as follows:

'Primary deviation refers to attributes or actions of individuals which violate some norms of the community. However, these deviations are not specifically labelled and remain symptomatic and situational as long as they do not create an officially recognised deviant role for the individual. Secondary deviation is deviant behaviour with social roles based upon it...the label and the adaptation to it creates the difficulties for the individual and the community.'  
(p.266.)

A child may be seen to be designated the social role of deviancy by entering the 'special education' system. Irrespective of whether it is a segregated or integrated system, parents and teachers may perceive the implications of this for the child very differently.

The importance of primary and secondary deviation is highlighted by D. Thomas (1982), who points out that the terms 'impairment', 'disability', and 'handicap' are often used interchangeably, although they are not the same. The difference is not straightforward (Warnock, 1978), particularly when there is no apparent

organic basis for the disability (Richardson and Koller, 1985, p.386). Thomas (1982), however, sees impairments as 'anatomical, pathological or psychological disorder' (p.6); disability as a description of a person's lack of ability to do specific tasks; and handicap as a psychological value judgement of the individual. Shearer (1981) also writes:

...a handicap is something that is imposed on that disability to make it more limiting than it must necessarily be.' (p.10)

Historically, attitudes towards the mentally handicapped have changed, as have theories of possible causes (see the Warnock Report (DES, 1978); Ryan and Thomas (1980); Tomlinson (1982); and Clarke and Clarke (1985) for more detailed consideration of this). In addition, there have been changes in how society deals with those who have a mental handicap - caring for them within the community or separating them from the community for the protection of society itself and/or the disabled individual. These attitudes have been influenced by more fundamental attitudes such as religious beliefs, by demographic changes, and humanitarian principles.

It is against this changing and sometimes confusing social background that parents' and teachers' perceptions of ESN (M) pupils can be better understood. At the same time, there are also features in the educational background of children which may lead to their differing perceptions.

## 1.2 Educational background

### 1.2.1 Nomenclature

Over the past 100 years the classification and nomenclature of pupils with mild mental handicaps have changed. As Clarke and Clarke (1985) succinctly summarise (p.40), in educational terminology the name for pupils with an IQ of over 50 has changed from the feeble-minded (1913, 1927 English Mental Deficiency Acts) to Educationally Subnormal (English Handicapped Pupils and Special Schools Regulations, 1959) to ESN (Mild/Moderate) (English Education (Handicapped Children) Act, 1970), and finally to



Children with Moderate Learning Difficulties (Warnock Report, 1978).

Apart from these classifications, the same children may now also be termed under the health provision as having mental impairment (if there is evidence of abnormal aggressive or irresponsible behaviour), or mental handicap (if compulsory admission to hospital is not required) (English Mental Health Act, 1983). Under the World Health Organisation (1968, 1977) they are termed as having mild retardation, and in the United States they would be termed as being Educable Mentally Retarded (EMR), as opposed in Trainable Mentally Retarded (TMR), who have an IQ below 50.

Parents, if they are even only dimly aware of these different terminologies, can be confused, and the definition of their child in itself (i.e. as mentally handicapped, or as having moderate learning difficulties) may affect their perceptions of him/her.

#### 1.2.2 Defining characteristics

Closely related to the nomenclature is the issue of defining the characteristics of these children. As will be seen, opinions differ (Clarke and Clarke, 1985), although generally there is a consensus that a multi-axial approach is most appropriate.

Intellectual functioning is one of the main axes. An IQ of 50 plus has been taken as a criterion for separating pupils with severe and moderate learning difficulties, yet, as will be seen in this study, a number of children in ESN (M) schools have IQs above and below 70 and 50 respectively, the psychometric parameters for defining this group of pupils. IQ should not be considered as the sole defining characteristic for reasons such as the standard error of measurement, the variability of the same IQ on different measures with different standardisation procedures, and the different rate of intellectual growth in these children (Clarke and Clarke, 1985). There is great variability between individuals with similar levels of intellectual functioning (Grossman, 1983), suggesting why only about one third of pupils with an IQ of below 70 are dealt with administratively (Clarke and Clarke, 1985), i.e. the majority of possible ESN (M) are not identified.

Social and Adaptive Behaviour is the second axis. As I have already mentioned (Section 1.1), socially acceptable behaviour is influenced by cultural and social mores, and as such can give rise to as many difficulties in its use as a parameter for defining ESN (M) pupils as can IQ. With an IQ of below 70 there is an increasing risk of having social problems, which becomes a certainty when the child's IQ is below 50 (Clarke and Clarke, 1985). IQ may be closely correlated with adaptive behaviour (as measured on such scales as the Adaptive Behaviour Scale (ABS)), but this is not always the case (Grossman, 1983).

In the United States the American Association of Mental Deficiency (AAMD) defined mental retardation as subaverage intellectual functioning with deficits in adaptive behaviour.

Some researchers (Zigler et al., 1984) propose that mental retardation should be classified solely on aetiology and IQ, partly because social adaptation is a vague and indefinite term. Conversely, Bean and Roszkowski (1982) suggest poor adaptive behaviour should be part of the definition of mental retardation. Wilson and Colwell (1985) propose that if handicap were defined in terms of character development, ability to handle emotions and personal interactions, rather than in terms of physical ability, social competence and intellectual performance, education would have different goals. At the same time, the ability to handle emotions and form personal relationships is to some extent related to cognitive functioning.

Differing opinions arise from the difficulties in defining social and adaptive behaviour, although the ABS appears to be a useful diagnostic tool (Clarke and Clarke, 1985). However, adaptive behaviour relates to specific settings, and a child inhabits many different settings (Grossman, 1983). Essentially, the classification of ESN (M) children is complex and may be a potential source for creating different perceptions in parents and teachers of these children, i.e. a child may have an IQ between 50 and 70 and show maladaptive behaviour at school/home, or in neither. In addition, what is considered maladaptive in one setting may not be (called) maladaptive in another, e.g. aggressive behaviours or stealing.

### 1.2.3 Associated characteristics

ESN (M) pupils are predominantly 'in lower social classes', unlike severely educationally subnormal pupils (ESN (S)), who are distributed across all classes (Kushlick and Blunden, 1974, p.50). A few have organic factors which cause mild impairment, and children with these are found in all classes, but for the great majority there is no apparent organic cause (Kushlick and Blunden, 1974). This suggests possible socio-cultural causes for prevalence of mild educational subnormality in working-class children (Rutter, Whitmore and Tizard, 1970). Not all studies support this evidence. Madge (1980), for instance, did not find proportionately more ESN (M) and ESN (S) children in poorer areas of Haringey. Characteristically, boys tend to outnumber girls in this group (e.g. Rutter et al., 1970; Madge, 1980).

### 1.2.4 Prevalence

Nomenclature and classification also highlight problems in estimating the true prevalence of ESN (M) children. Richardson and Koller (1985) review a number of epidemiological studies in this country (Birch et al., 1970; Rutter et al., 1970), the United States (Gruenberg, 1964) and Sweden (Gustavson, 1983). Potentially, 2.5 to 3.0 per cent of the population will fall two standard deviations below the mean. Assuming 100 to be the mean, with a standard deviation of 15, one would therefore anticipate that 2.5 to 3.0 per cent of children will be classified as having an IQ of below 70.

In their review of studies, Richardson and Koller (1985) concluded that, for a population of 1,000 between the ages of ten to 14 and 15 to 19, the prevalence rates vary from 0.48 and 2.97 to 80.11 and 77.91 respectively, depending on the demographic details of the community studied, case-finding methods used, as well as the 'vagaries of testing'. For ESN (M) children aged between ten and 14 years prevalence ranged from 2.9 per 10,000 population in Salford (Susser and Kushlick, 1961) to 212.5 per 10,000 in England and Wales (Lewis, 1929). With a school population of 8,501,500 as at January 1982, of which 126,500 were in special classes, there were over 55,560 children regarded as ESN (M) in England (DES,

1983). Thus ESN (M) children comprised 43.9 per cent of children in special education, and 0.65 per cent of the total school population.

There is an increase in prevalence of ESN (M) children during the school years, with a peak around the transition to secondary school, when pupils' learning difficulties may become more apparent (Richardson and Koller, 1985; Madge, 1980). After leaving school they disappear back into the general population, often finding work, marrying, and leading successful and normal lives (Richardson et al., 1984). Richardson and Koller (1985) also stress that in adult life adaptive behaviour skills also take precedence over IQ. By inference, those who have been classified in childhood primarily on low IQ without any associated social and adaptive behaviour problems may no longer be in need of help from administrative services. However, with rising unemployment, their position may now be bleaker (May and Hughes, 1984). It is possible they will continue to be known to the health and social services for a longer period. Therefore, prevalence of ESN (M) children may reflect characteristics of the system as much as the children themselves.

#### 1.2.5 Education of ESN (M) pupils

The problem of classification and establishing prevalence of ESN (M) children may partially indicate how different perceptions of these pupils can arise between parents and teachers. It is also appropriate to look at their changing education over the past 100 years, with special emphasis on 1) segregated/integrated schools; and 2) the role of parents. (This is discussed in more detail in the Warnock Report (DES), 1978; Ryan and Thomas, 1978; and Clarke and Clarke, 1985.)

In 1870 Forster's Education Act made a commitment to universal education in this country. This raised two important issues which are relevant to this thesis. Firstly, in making children go to school it highlighted, and in part created, a group of children who were then called the feeble-minded. Secondly, compulsory education meant that parents lost their absolute control over what their children did with their time. For some part of each day they had to be in school.

From the end of the last century these feeble-minded children were educated separately. Even then, the characteristics of this group were difficult to define, although Binet's (1908) measure of Intelligence Quotient (IQ) became a yardstick for defining the mentally subnormal. In effect, education of the feeble-minded remained unchanged until the 1944 Education Act, despite the Wood Committee's (1929) recommendation of a swing away from segregated to integrated schooling for the dull or backward group.

The 1944 Education Act brought special education (i.e. 'education by special methods' 1944 Act) back within the normal education system. Two factors emerged from the Act that have become recurrent and growing themes in subsequent reports and legislation. The first was the move towards integrated education, although ESN children continued to be educated separately. The second was the role of parents in the process, although their rights continued to be minimal.

No major changes took place in the education of mentally subnormal children until the 1970 Education (Handicapped Children) Act which stated that those who were most severely retarded should be placed under the education rather than the health services. They would become known as ESN (Severe). The previous ESN children would be known as ESN (Mild). All children were therefore deemed to be educable.

The Warnock Report (1978) and the Education Act (1981) continued the trend in special education, in particular in relation to redefining the classification of children in special education, moving from a segregated to an integrated system, and emphasising the role of parents in the education process.

#### 1.2.6 Special needs

The Warnock Report (1978) brought a basic change in the classification of children needing special education. The old categories of defining pupils by disability were replaced by the concept of 'special educational needs'. In other words, while the 1944 Act located special need entirely within the child, now it was necessary to take into consideration his/her interactions with

home, school and the wider social environment (Wedell et al., 1983), a very different concept. It meant different types of questions might be asked, for instance, how a child's needs could be assessed and met, rather than how his/her disability could be overcome, and consideration of a school's inability to meet these needs (Welton, Wedell and Vorhaus, 1982).

The definition of special needs was circular (Wedell et al., 1983), for special educational needs were defined in terms of whether a child had learning difficulties, but if he had learning difficulties he was deemed to be in need of special education. The concept of special need is relative. Warnock (1982) also admits that it had been hoped that special needs could be seen as a need, not 'an optional extra' (p.57), but the very lack of definition endowed it with a negative connotation.

#### 1.2.7 Integration

Meeting the special needs of children with learning difficulties changed within a period of seven years from support of a segregated (DES, 1975) to support of an integrated system (DES, 1980) (Barton and Tomlinson, 1984). The Warnock Report (1978) was fundamental in changing this perspective. Although the mechanism was completely different, ideologically the justification for both systems was identical.

This change of emphasis can be seen as a potential source of confusion for parents and teachers, and can lead to different perceptions of not only the children, but also the education system provided. For instance, integration can refer to: a) locational unity (disabled children are educated on the same site as the ordinary school); b) social unity (disabled children on the same site, having social contact with ordinary children); and c) functional unity (the school makes positive plans to integrate disabled children into all aspects of academic and social life of the school (Warnock, 1978). It is the last of these that the Warnock Report advocated, but schools and LEAs can well have the semblance of a functional unity, which is no more than locational.

Integration presupposes that the ordinary school is itself a system which can be adapted to integrate children with learning

difficulties and provide the necessary social facilities. Hegarty (1982) argues that integration is possible, and to a far greater extent than is provided, but where a school cannot accommodate pupils with special needs, special schools may be preferable.

Johnson and Johnson (1981) looked at the issue of mainstreaming (the American equivalent to integration) in the United States, and found that social interaction was promoted when children of mixed ability worked co-operatively in small groups. The interaction of handicapped and non-handicapped pupils in class then tended to continue into post-instructional social interaction. However, they noted that when children are in the same class, mainstreaming often meant individualistic learning, which led to minimum interaction between differing groups.

In addition, there is the difficulty of establishing criteria for evaluating where children's needs are best served, and this again may relate to differing views and perceptions by parents and professionals. Successful integration can be defined as:

'...a situation in which a child 'coped'.' (Jamieson, Parlett and Pocklington, 1981, p.3)

The difficulty arises in understanding what is meant by 'coping'. It can mean anything from a child just keeping his head above water in his work and not being stigmatised, to managing to complete the work competently and engaging in successful social interaction with other children (Jamieson et al., 1981). This looseness in determining what amounts to successful integration also raises problems when stating objectives and in assessing whether these have been reached; and will affect perceptions of children's abilities.

Gottlieb (1981) questioned the positive effect of integrated education in the United States. He argued that the assumptions which propelled mainstreaming for EMR (Educable Mentally Retarded) pupils were academic achievement, life adjustment, social adjustment in school, stigma reduction, racial composition in mainstreamed classrooms, and availability of individualised instructional strategies. He concluded that the present data had not shown that there had been a major improvement in their education.

A more recent American study (Rosenberg, 1983) has indicated that EMR students placed in regular classes made greater academic achievements than those in segregated schools, and were not adversely affected in terms of their social status. Yet there is no guarantee in the resulting social status, and a wide variety of factors, both individual and environmental, may contribute to the special child's social status in a regular classroom (Morrison and Borthwick, 1983). For instance, it was found that both teachers and peers rated male mildly retarded children less favourably than girls. Cortez (1982) found that teachers, parents and students agreed on which personal or behavioural characteristic of mildly handicapped children are important for successful adaptation into middle or senior mainstreamed classes.

The justification of integration often rests on the appeal of social justice rather than psychological or educational grounds (Stobart, 1986). Although the American literature indicates that mainstreaming may be justified, several important conditions have to be met. For instance, interventions should be deliberate and structured in order to integrate special children into the classroom. Only then can the benefits of integrated education be properly evaluated.

### 1.3 Parents as partners

An important aspect of the Education Act (1981) was the emphasis on parents as partners in the education process. The Act ruled that they should have greater involvement in the assessment of their children, and should have access to the 'Statement' compiled by the LEA relating to children's special needs. They were given the right to appeal against any decisions relating to assessment and placement. LEAs had a duty to inform parents of their right of appeal, provide a 'Statement', and provide parents with the name of an officer (Named Person) from whom they could obtain further information and advice. Some evidence suggests that this does not always occur. A recent survey showed that few parents are informed about the procedures involved in statementing (Sandow and Stafford, 1986).

The concept of parents and teachers as partners is centuries old (Henderson, 1974), and is a complex issue. Firstly, in the recent



past professionals have tended to assume they knew best, and parents were minimally involved in the education process. Conversely, some parents may have felt that either they should leave the education of their children in the hands of those whom society designates as experts, or that they had no other option. Even now parents do not rank being treated as equal partners at all highly (Sandow and Stafford, 1986).

Secondly, the concept of partnership also suggests a relationship of equality, with parents bringing a mass of knowledge about their child, and with professionals bringing their particular expertise. Warnock (1978) stated that parents may need to be given information, advice and support to cope with their present and future problems and anxieties, a statement in itself implying a lack of equality in status. Skills and expertise may also need to be given to parents, and some may need to be shown that their retarded children need to learn skills which normal children pick up naturally (Mittler, 1979a,b). However, when parents become recipients of this expertise and help, it can also place them in a difficult position vis-à-vis withstanding professional judgements, particularly if they do not agree with the advice and wish to have their child helped in other ways. This may be increased even more if they and the teachers perceive the child differently.

Yet it is of equal important to remember that parents and families of handicapped children are not a homogeneous group. They, like their children, are unique (Canino and Reeve, 1980; Mittler and Mittler, 1982; Schulz, 1983; and McConachie, 1985).

Thirdly, the possible asymmetry in status may be linked to a real asymmetry in need between professions and parents (Gliedman and Roth, 1980). Parents need professional co-operation to help their child in a way that professionals do not feel they need parental involvement. Co-operation may really mean parents are expected to fall in line with professional practices, which are often considered to be nonproblematic (Barton and Moody, 1981). Schulz (1982) a parent of a retarded child, cogently argues that parents are often aware of the difference between their social and economic status compared to that of teachers. Articulate, middle-class

parents can be at an advantage and may ensure that their ESN (M) child is left within the ordinary education system. At the same time, complete non-cooperation with the authorities, by not attending meetings with professionals, may forestall, and even prevent, placement of a child in special education (Sewell, 1981).

A further point related to this is that teachers may perceive their own and parents' roles in the education process as being clearly defined. This may not agree with parents' views. For instance, in their review, Davies and Davies (1985) report that the majority of a group of parents of children needing special education saw the teacher's major role as developing cognitive skills, as did teachers in special education. However, teachers in comprehensive schools reported that their primary role in the education of children with special needs was in teaching social skills.

Finally, parents give continuity in a child's life which school and teachers do not necessarily provide (Schulz, 1982). However, credentials may still hold considerable sway, and in practice professionals may ignore parental knowledge (Gliedman and Roth, 1980, p.229), although in some areas parents are likely to know more about their children than professionals. At the same time, teachers and other professionals are also likely to know things about a child that his parents do not.

#### 1.4 Parents' feelings towards special education

Parents' right of appeal to the Minister of Education against any decision relating to assessment and placement of their child presupposes that they may have genuine objections either to the outcome of assessment and/or the best way to meet the special educational needs of their child. Studies of parents' feelings towards special education have been equivocal.

Ferrara (1977) investigated parents' attitudes towards normalisation in the United States by giving a 5-point Likert scale questionnaire to 250 parents of either EMR or TMR pupils between the ages of six and 21 years. The questionnaires were in two forms: a) relating to normalisation for retarded children

generally; and b) relating to normalisation specifically to the parents' own child. Of the 250 questionnaires distributed, 107 of the general referent and 110 of the child-specific referent were returned. Analysis indicated that parents answering the general referent questionnaire were more positively in favour of normalisation than were parents answering the child-specific questionnaire ( $p < 0.01$ ). This would seem to indicate that, although the principle of normalisation is acceptable, some parents, when referring to their own child, see advantages in the smaller classes in special schools, where teaching may be seen as more child-oriented.

However, Mlynek, Hannah and Hamlin's (1982) research tentatively suggests that parents of children with learning disabilities are more likely to be in favour of mainstreaming than those of mentally handicapped and emotionally disturbed children. This is because children with learning difficulties have a specific rather than a generalised deficit, and are more familiar with the process of mainstreaming than the other two groups.

Rosenberg (1982) found parents in his study supportive of mainstreaming efforts. Hegarty (1982) also found UK parents clearly wanted their children educated in normal schools, but they were also concerned about both the nature and quality of the education provided.

In contrast, Sandow and Stafford (1986) report that 13 of 22 parents of children with moderate learning difficulties did not feel integration was a good idea. Kingsford (1984) also found that parents and teachers of TMR students may support special school provision, but Smith and Sykes (1981) reported that, retrospectively, Australian parents of 16-plus mildly handicapped adolescents were equivocal in their view about special and regular class placement.

Concern and misapprehension may arise through lack of expert knowledge about the educational aims and objectives in schools, especially where parent-teacher communication is poor (Davies and Davies, 1985). When integration is loosely defined, parents may feel unsure that their own child will benefit, at the same time

seeing the disadvantages and possibly associated stigma of going to a special school or class. They realise that special education implies extra help for their child, whether in a separate class or school, which will facilitate the development of their child's potential, but have a vague feeling that the usual connotation of 'special' implying high or extra attribution may have a double edge.

#### 1.5 What is the ESN (M) child?

The above discussions have shown that the group of pupils who are at present termed as having moderate learning difficulties have been given different names throughout the last 100 years. We have also seen that the classification ESN (M) is an administrative category rather than a definitive description of pupils' abilities, as they do not form a homogeneous group, and yet may be unable to fit into the structure of some secondary schools (Tomlinson, 1981). Nonetheless, these children have still been given this classification. How is this decision made, or what is the ESN (M) child?

Tomlinson (1981) has attempted to answer this question. Eighty professionals involved in assessing 40 ESN (M) children and the children's parents were interviewed to discover their 'account' of 'What is' an ESN (M) child. She listed ten possible accounts which described the ESN (M) child, taken from an analysis of interviews and articles in professional journals and books. These were: 1) Functional (a child cannot do X); 2) Statistical (a child has a low IQ as measured on standardised tests); 3) Behavioural; 4) Organic; (5) Psychological (the child is emotionally disturbed); 6) Social (low socio-economic class; poor housing; poor maternal care etc.); 7) School (child truants, or school rejects etc.); 8) Statutory (a child may be 'certified' as in need of special education); 9) Intuitive (something was wrong); and 10) Tautological (child is in need of special education).

There is evidence that parents can be confused by what professionals say. Parents tended to use intuitive accounts most frequently (i.e. something was wrong with their child), and only talked of functional accounts (the child's inability to carry out

a number of skills) after they had been told their child was failing at certain tasks in school. Only a fifth mentioned behavioural difficulties, and another fifth felt that something was organically wrong, similar to medical officers. Unlike all the professionals, they did not consider social background as accounting for ESN (M) children's problems.

Head teachers of the referring schools used both functional and behavioural criteria for accounting for the ESN (M) children, although they also used intuitive judgements in deciding who was potentially ESN (M). Heads of special schools also used functional and behavioural criteria, but in addition mentioned school accounts (i.e. that normal schools could not hold ESN (M) pupils). Heads of referring schools did not give this account, thus appearing to see themselves in no way responsible for their inability to deal with children who did not fit into their particular classroom structure.

Educational psychologists also used functional and school accounts, but in addition used statistical criteria (below 70 IQ).

Medical officers who play an important part in statementing tended to use statistical accounts, but a few also mentioned organic causes. Like all the professionals involved, they gave social accounts for ESN (M) children (i.e. poor parenting, low income), they also tended to assume that ESN (M) children came from lower socio-economic classes, and that ESN (M) children were characteristic of the working class (a tautology).

#### 1.6 Summary - Different perspectives

Given the different professionals definition of ESN (M), it is possible to see why parents may find it difficult to have a clear idea themselves, and thus why their perceptions may differ from those of teachers.

Both here and in the United States ESN (M) pupils are generally classified on both low intellectual functioning and social incompetence. At the same time, the child's environment plays an influential role in determining the child's social behaviour, but

the kinds of environmental factors which will influence social behaviour differ from those that most affect cognition (Rutter, 1985).

If professionals cannot agree on a unified account of ESN (M) children, parents at the very least may be confused. Tomlinson's research (1981) suggested that parents may be aware that their child's development and behaviour is slightly different from that of other children, but appear to rely on expertise and knowledge from professionals to pinpoint exactly how this is accounted for.

Historically, it has been shown that the expert advice and opinion which is given by professionals can lay different emphasis on a variety of causes. This in turn affects educational policy and modes of care. To some extent it is affected by the individual's interpretation of normality and deviancy, and his/her view of the individual in society. In the past one hundred years or so, it would appear that the general consensus of opinion has been in favour of separating the deviant from the normal - the individual had to fit society's expectations or be set apart, and was better catered for in segregated education. At present, there is a shift away from this policy. Education is to fit the child, and not the child the education system. Even so, the individual's needs can only be considered within the context of a general system which will mutually benefit the normal and the deviant.

When parents and professionals meet to consider the education of a disabled child, they may have different views on the child's ability, their assessment of his needs, the short-term and long-term goals of education and care, and how these may be effected. Each child has the right to become as independent as possible. Parents may also feel they are not involved sufficiently in decision making, and may have different goals from teachers, based on different perceptions as to when a pupil is ready to start a programme of social and independence training (Mittler and Mittler, 1982). Furthermore, Ferrara (1979) has asked what happens when parents and teachers disagree about the advisability of starting up independence training programmes, such as travelling alone etc. There are, of course, no quick or easy answers.

Parents' knowledge of the integration process plus the degree of disability may affect their attitudes to integration (Mlynek et al., 1982).

The Warnock Report (1978) has placed the question of assessment as central, and states the importance of parents in this procedure. However, once the ESN (M) child has been placed in special education, it seems that, in practice, many parents have little further involvement. (This is not especially unique to disabled children.) How parents as well as teachers assess the child's continuing development may be of considerable importance. For instance, a mother may believe that her child will eventually catch up academically. When she sees him failing at present, she may experience considerable frustration and worry when the teacher's main aim appears to be that of ensuring the child learns acceptable social and independence skills (Davies and Davies, 1985). The teacher may give less emphasis to academic skills which he/she believes the child will never fully master. From different perspectives, both Hannam (1980), as a parent, and Jeffree and Cheseldine (1981), as researchers, have expressed concern about poor communication between home and school. Spooner (1982) argues that teachers often fail to use their teaching and classroom skills when communicating with parents. Jeffree and Cheseldine state (p.11) their concern that parents seem to know little about what goes on at school, and school has a similar lack of information about what is happening at home. Yet children can only be fully helped to learn and generalise their skills when their full social context is understood (Mittler and Mittler, 1982).

We return full-circle to 'The Little Prince'. Do those two groups of people who have closest contact with a child as he/she grows up see him/her from the same point of view? If not, how can this best be understood? Do they interpret what they see differently because of the different kinds of knowledge and preconceptions they have? Does the child manifest different behaviour at home and at school? If he does, is this because he is responding to different demands based on differing preconceptions about his ability in different environments? It is likely that all these

questions and more may be asked about how parents and teachers perceive a child's behaviour, how they account for this, and how this affects the kind of questions they ask about his present and future needs, both in and out of school.

More specifically, how parents and teachers assess the ESN (M) child's social, independence and life skills is likely to affect the control they exercise over his freedom and the way they interact with him. Do then parents and teachers assess ESN (M) children in the same or different ways? Informal contact with parents, teachers and playleaders involved with disabled children suggest they differ, but is this in fact the case?

The present thesis will consider these problems, using direct observations of children in their classrooms with their teachers, and at home with their mothers. Questionnaires to mothers and teachers will examine the mothers' and teachers' perceptions of children's competencies; and repertory grids will be used to look at the mothers' and teachers' constructs or frame of reference when judging children. Prior to this, the following literature review examines some of the questions already raised, and considers the evidence pertaining to them



## 2. LITERATURE REVIEW

### 2.1 Introduction

In view of the Warnock Report's call towards more parental involvement in special education of disabled children which will involve closer teacher and parent liason, the Introduction has shown that parents and professionals do not always view ESN (M) children in necessarily the same light (Tomlinson, 1981). If communication is to be effective in establishing the best environment to facilitate a pupil's education and development, then it would seem vital that the teacher and the parent have, if not a common view of the child, then an understanding of the other's view.

First, a few points need to be considered: a) the assumed causality between parents' or teachers' perceptions of their children and their interaction with the children; b) general labelling effects.

Overall the studies reviewed can be divided into those concerned with:-

- 1) Teacher attitudes and perceptions.
- 2) Parent attitudes and perceptions.
- 3) Parent/teacher attitudes and perceptions.

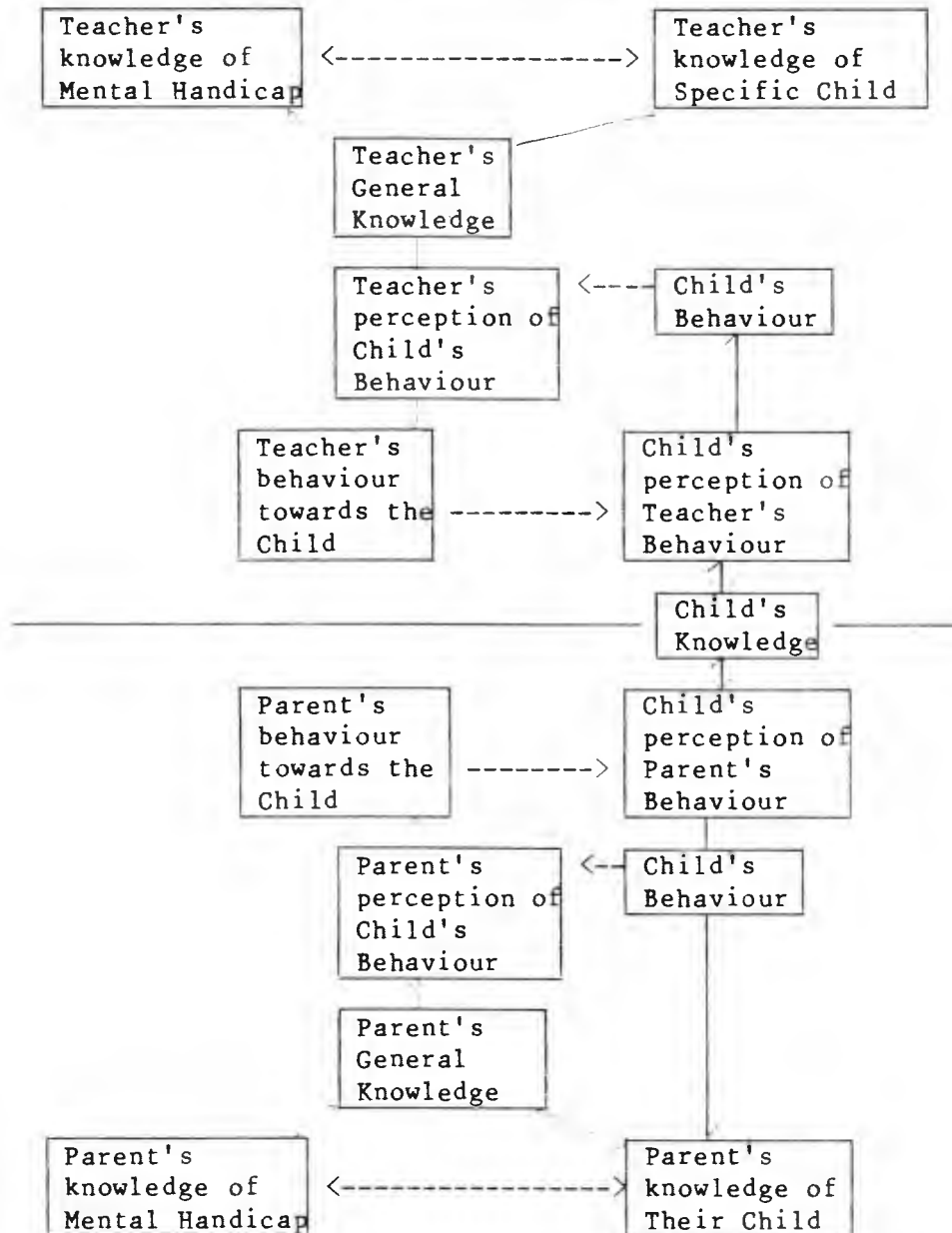
Although the main area of interest is in the third of these three sections, studies comparing parents' and teachers' perceptions, it is also relevant to examine some of the research looking at parents' and teachers' views separately.

#### 2.1.1 The assumed Causality between Parents' and Teachers' perceptions of their children and their behaviour towards them

In studying parent/teacher perceptions of pupils, there is a general assumption that the attitudes held by parents and teachers reflect the child's actual behaviour, although generally most results from these studies are of a correlational nature only. Organist (1971) has analysed the necessary links of causal assumptions in this chain. Figure 2.1 expands this further.

FIGURE 2.01

The Causal Assumptions between perception of behaviour and its effect on that behaviours with regard to Parents/Teachers and ESN (M) children



(Considerably adapted from Organist, 1971)

---> = Direction of causal effect

The Figure suggests that a teacher's knowledge will be both general and specific. He/she will hold attitudes and beliefs about the individual and society, normality and deviancy as discussed in Chapter 1. He/she will also have specific areas of knowledge and attitudes relating to the mentally handicapped as a group of people and to a specific child who is handicapped. A

similar, but more simplified model is also found in Cunningham and Davis (1985: P.36).

In the classroom both the teacher and the child exhibit behaviour which may be affected by many variables, e.g. other children and adults present, the social, cultural and physical environment. (These have been excluded from the table for the sake of simplicity although they will be important factors).

Specifically, when the teacher is aware of the child's behaviour his past experience and knowledge will allow him to interpret and make some sense of what the child is doing. Thus, the teacher's perception in this model is defined as a conjunction of knowledge from the past, an awareness of events in the present, and what he perceives as valuable. The teacher's interpretation of the child's behaviour will help him decide how to behave towards the child. In turn, using his/her knowledge and experience the child interprets the teacher's behaviour which will cause him/her to behave in a specific manner. When the teacher perceives the child's reaction, he may feel his previous interpretation was correct, and reinterpret or modify his knowledge of either the child or the handicap.

Equally a mother's perception of her child's behaviour will be affected both by her considerable knowledge of her child and her knowledge of mental handicap generally (which may be scant). Her knowledge will shape how she perceives and interprets the child's behaviour. How the child's behaviour is perceived will affect the mother's behaviour towards her child. Although the mother may choose to ignore her child, it is assumed that the child perceives the effect of his behaviour on the parent which will in turn affect how he behaves. If the child's behaviour is as the mother anticipated then this may confirm the mother's earlier interpretation and confirm her expectation that he will behave like this in the future.

What is important in considering this is that children need a parent (or teacher) to reflect back the consequences of their behaviour (McConachie, 1985) so that they learn to structure how they interpret their own and others actions. Thus mother-child and

teacher-child interactions become part of the way mothers, teachers and children understand not only each other, but the more general attributes of mothers, teachers and children.

A study of the sociometric ratings of mildly handicapped children in the classroom has shown that teacher and peer perceptions of EMR children are an influential link between actual behaviour and achievement in EMR children and their social status (Forness, Morrison and Guthrie, 1982). The authors argue that teachers become "a potential source of information to EMR children" which influences their choice of friends. Canino and Reeve (1980) point out that parents may devote themselves entirely to their handicapped children thus satisfying their needs and creating a situation of mutual dependence. This excessive care may create a self-perpetuating cycle so that parents' and children's behaviour reinforces and confirms each others' perception of the situation.

In the studies to be reviewed the links described in Table 2.1 will be considered in more detail.

#### 2.1.2 Labelling - stigma or no stigma

Closely related to the present research, and to an extent inherent to it, is the issue of labelling and the possibility of associated stigma. There is considerable literature on this subject with respect to peer and teacher interaction with children labelled handicapped, but I shall only comment on a few papers which appear generally relevant to the present study.

Macmillan, Jones and Aliaoa (1974) point out that there is a fine distinction between the denotative and connotative meanings of the label mentally retarded, which are parallel to the previously discussed meanings of impairment (a description of symptoms and lack of ability) and handicap (the effect of attitudes about disability which are not necessarily implicit in disability). The denotative label relates to classification in descriptive terms. The connative meaning suggests the emotive issues of separateness and abnormality.

Macmillan et al's (1974) major review of the effect of labelling on retarded children covers a wide range of effects. In an

attempt to distinguish the issue of labelling from other closely related areas, they declare that what is at issue is twofold:-

a)"The consequences of mislabel when the label is appropriate for some children and not others." (P.242)

b) The impact of labelling generally whether or not the label is appropriate.

They suggest that labelling has two separate yet interactive outcomes; the direct effect on the child; and the indirect effect of teachers, parents, peers, etc.

Pointing to methodological problems when trying to assess the effect of labelling, they argue that being labelled is generally concurrent with special class/school placement and all that that implies, and is, therefore, by its very nature difficult to isolate as an independent variable. The label educationally subnormal is not based on IQ alone; and certainly in the case of ESN (M) children who may have been at normal schools, placement in an ESN (M) school or class may in part be related to the normal teacher's tolerance of deviant academic achievement and social behaviour, the school's policy and parental pressures.

In reviewing the quality of many of the studies, Macmillan et al (1974) argued they were frequently poorly designed (label being confounded with class placement, curriculum, teacher, peer group and or teacher/pupil ratio), or show sampling bias. They concluded that in general, labels in themselves do not appear to have deleterious long-term effects. Nine years later the same authors (Aliaa and MacMillan, 1983) continue to state that the evidence is at best equivocal and inclusive.

Commenting on MacMillan et al, Guskin (1974) agrees that the label of mental retardation may be in no way detrimental to the child, but, by extending their conceptual analysis, he suggests that there is a tendency to confuse professional, lay and academic statements with regard to labelling. For instance, labelling may be done by a number of agencies, some giving a greater formality and power to the label (eg. school and the educational services), and some being more informal (neighbours, family or local children). In addition, Guskin suggests that the label as such need not lead one to anticipate a special set of behaviours in an individual.

Yet Aloia and MacMillan's 1983 study indicated that the label EMR suppressed the expectations of teachers in regular classes in terms of children's academic ability, teachers' own ability to work with children and their general impression of EMR children. Even so, the variance in expectations actually accounted for by the label was small ( $R^2=.05$ ). The authors conclude that many factors affect the influence of the label attached to a child and the overall label phenomenon is extremely complex.

## 2.2 Teachers' Attitudes and Perceptions

### 2.2.1 Introduction

The review of the literature of parents' and teachers' attitudes and perceptions of mentally handicapped (and sometimes normal) pupils will be seen to be uneven. This has been a deliberate choice.

The area of teachers' expectations, and the effect of these on classroom interactions with pupils, has been studied in some depth over the past fifteen to twenty years. Hence I have referred to a number of reviews and briefly discussed a few individual studies, However, some studies such as that by Nash (1973) of normal classroom interactions, have been discussed at some length, because there are specific links in terms of the methodology of the present thesis.

In contrast, there has been considerably less research on parental attitudes and their link to the mentally handicapped child's behaviour. This is particularly so with the young adolescent. Although a more difficult area to research because of getting access to the children at home, this disparity may seem strange. After all, children spend far more of their early lives at home than at school, and parental attitudes will continue to be highly influential in the child's upbringing, whether handicapped or normal. Research papers particularly relevant to parents' attitudes towards, and behaviour with, mentally handicapped adolescents and children are often unpublished. Because of the difficult access to such research, these studies have been described at some length.

## 2.2.2

In a study of eleven teachers of 42 pupils in special education in Boston, U.S.A., Ensher (1973) wrote:

"More than one half of the teachers who participated over the two years, variously manifested behaviours of over-protection, overwhelming assistance, excessive control, impatience, incessant dwelling on weakness rather than on strengths, and conspicuously absent expectations for positive change with children in their classes." (P.40)

The categories of behaviour observed were: a) teacher-child interactions; b) selection of instructional tasks; c) methodologies of task presentation; and d) organisations of class instruction. Ensher described her conclusions as "clinically derived" from two years of intensive observation, and felt that many of the pupils were viewed and treated by their teachers as mentally incompetent individuals, who carried the "burdens of inexorable attitudes of their teachers". She believed this considerably reaffirmed the pupils' feelings of inadequacy in the short-term, although it was not possible to assess the long-term effects.

The basis of this conclusion is unclear. The "clinically derived" conclusion may be no more than her professional opinion, although as such should not be undervalued. It suggests the possibility that teachers' attitudes may adversely affect their pupils in special education, or at least appear to do so. The rest of this section will look at what evidence there is in support of this argument. There is a vast literature on teacher perceptions and expectations of pupils and how this affects the children's behaviour. Two of the fullest reviews are found in Pilling and Pringle (1978) and Rogers (1982). Many of the studies reported relate to normal rather than handicapped pupils. The present review will mention only a few of these studies, and, as the main emphasis of the thesis is on ESN (M) children, it will not be as comprehensive as either that of Pilling and Pringle, or Rogers.

2.2.3 Teachers of Normal Pupils in manipulated conditions

Before looking at the way teachers perceive handicapped pupils, it seems right to comment very briefly on a controversial work published in 1968 which described an attempt to manipulate teachers' expectations of normal children and measure the effect

of this on the children's behaviour. Rogers (1982) describes the study as 'opening up the Pandora's box of the social psychology of education' (p.2). In "Pygmalion in the Classroom" (1968), Rosenthal and Jacobson investigated how teachers' expectations of pupils materially affected the children's performance at school.

Teachers were given a list of 20 per cent of all pupils in their classes whom they were told were potential bloomers (i.e. it was expected that they would do particularly well in the coming year) when in fact the children had been randomly selected from low, middle and high bands. Pupils were tested (using Flanagan's Test of General Ability) prior to this and subsequently one or two years later. Rosenthal and Jacobson found that the intellectual growth of the experimental children increased significantly more than that of the control group, although this was only significantly so for those in the two youngest age groups.

As far as the authors were concerned this confirmed their hypothesis that a person's expectation of another served as a self-fulfilling prophesy; or, in this case, when teachers were told some children were bright, their expectations appeared to affect the children's actual attainments.

#### 2.2.4 Criticism

The Rosenthal and Jacobson account produced a considerable amount of vehement criticism. In part this was because, if Rosenthal and Jacobson's argument that positive attitudes affected children's abilities advantageously was correct, then it was likely that it would also be the case that when they had low expectations..

"...teachers might be responsible to some extent - however unintentionally - for poor scholastic performance of socially and culturally disadvantaged children." (Pilling and Pringle, 1978)

However, some criticism levelled at the study was to the point. It is questionable whether the teachers' expectations had in fact been altered by giving them the list of potential bloomers. Nuermberger (1969) and Snow (1969) pointed out that Rosenthal and Jacobson admitted that many of the teachers had forgotten the majority of names given to them two years before, and some had



indeed hardly looked at the list in the first place. If the teachers did take so little notice of the names of the children, it can be argued that their expectations might not have been altered at all, and the research founders. Browne (1982) also points out that 20% of the original subjects were lost, and that no attention was paid to what the teachers were supposed to have done to create the effect.

A second major criticism, raised by Thorndike (1968), Snow (1969) and Elashoff and Snow (1971), relates to the inadequate norms for the Test of General Abilities for the youngest group (first graders) tested by Rosenthal and Jacobson. They argue that the very low scores obtained on the first testing by the youngest children can be considered unreliable. Rosenthal (1969) claims that this invalidates the gain seen in the later improved scores, but points out that, even if one excludes this youngest group, expectancy results were found in the older groups of children, although admittedly at less significant levels.

In general terms Pilling and Pringle (1978) feel that the criticism over the measurement of IQ, the basic design and sampling error are plausible, but not always well-substantiated by those who criticise the work. Rosenthal and Jacobson have themselves argued that, where so-called replications of the study have been carried out (Clairborn, 1969; and Fleming and Anttonem, 1971), some variable or other has been changed, or teachers partly knew in advance the hypothesis behind the research. In an exact replication by Mendels and Flanders (1973), a similar gain in intellectual levels was found, although the effect was not significant.

#### 2.2.5 Teachers of normal pupils and naturally occurring expectations

Results of naturally occurring expectations in the classroom cannot, of course be considered in terms of causal links. Rogers (1982) argues that, when looking at the overall pattern of studies in this field, it is difficult to demonstrate clear expectancy effects although some studies (Rist, 1970; Palardy, 1969) point in this direction. Rist's (1970) study of a single kindergarten

teacher and her class over a year indicated that she may have grouped children according to her image of the ideal child (cleaner, better dressed, 'nice'), although she indicated that the grouping was on whether the children were fast, medium or slow learners. By the end of the year, Rist reported that the teacher was limiting her teaching to the top table, and ignoring the other two tables. When the children moved on to the second year, the first year top group were all contained in the second year top group, and this effect continued on to the third year schooling. Palardy (1969) had shown that differential ability in six year old boys' and girls' reading skills equated with teachers' beliefs either that boys and girls had similar abilities, or that girls had higher ability at this stage. At the same time, teachers may have been correct in their assessments, which were reflected in the results.

Bolstad and Johnson (1977) looking at the link between teachers' assessment of children as well-behaved and children's behaviour, found that teachers' perceptions corroborated observed behaviour in the classroom. Specifically Bolstad and Johnson found that non-attending to task was used as a clear criterion for teachers in their ratings of classroom behaviour. However, the authors point out that some teachers were 'simply inaccurate' in judging students' behaviour in terms of the observations in the study.

#### 2.2.6 Conclusions

Overall, it appears to have been extremely difficult to manipulate teachers' expectations successfully, and thus infer a causal link between teacher expectancy and the effects on children's IQ levels. Pilling (1978), in considering the literature arising immediately out of the 'Pygmalion' research, has assumed that there may appear to be some evidence to support the hypothesis of teacher expectancy effect. This is also argued by Browne (1982). Rogers (1982) is perhaps more tentative. While acknowledging the importance of Rosenthal and Jacobson in opening Pandora's box, he feels that there is no consistent picture of teacher-expectancy effects in work reviewed so far.

### 2.2.7 ESN (M) Children

This extremely brief summary of Rosenthal and Jacobson's study and subsequent research illustrates attempts made to manipulate teacher expectations in connection with normal children. In the normal school, teachers will presumably anticipate that each child entering their class may have considerable ability and potential in different subjects. However, the case of teachers in special education is not parallel. Here teachers know by the very fact that they work in a school for the educationally subnormal that they will teach children whom they believe to have limited abilities and potential, learning difficulties, and/or behaviour problems. This may lower their expectations of the children's final intellectual and social achievements.

A study by Mason (1973) reported in Rogers (1982) suggested that negative information has a greater effect than neutral or positive reports on teachers' ratings of videos of children. If negative expectancy has a more potent effect than positive expectancy, then the use of any negative labelling or reports should be considered with care.

At the same time, if teacher expectations can be negative towards the handicapped, they can presumably also be positive, i.e. raised expectations might be considered to raise the IQs of handicapped pupils. Meyen (1980) attempted to replicate the Rosenthal and Jacobson study using 162 boys and girls with a mean IQ of 68, and 16 teachers all experienced in teaching the mentally retarded. As with Rosenthal and Jacobson, children were tested before and after teachers were told that 20 per cent of the children (randomly selected) were potential bloomers. Meyen's results did not concur with those of Rosenthal and Jacobson. The experimental group showed no significantly greater improvement than the control group as a whole.

Pilling and Pringle (1978) describe a study by Schwartz and Cook (1972). No significant relationship was found between teachers' naturally occurring expectations of their 6 to 8 year old EMR pupils' academic progress, and the pupils' real achievement gains as measured by the "Wide Range Achievement Test". Pilling and

Pringle (1978) comment that the teachers' expectations might well have been too low to affect pupil performance.

These results are not easy to interpret, but do not show any real evidence to support the effect of expectations on ESN (M) children's performance. While it may well be that expectations affect how well children perform, it can equally well be argued that the results show that teachers can accurately assess their pupils' ability. If the latter is the case, then Schwarz and Cook's result suggests that teachers of handicapped children may be less good as assessing their pupils than teachers of ordinary children.

Rogers, however, feels that overall 'the teacher-expectancy effect is potentially omnipresent if not actually so' (p.167). Further, both he and Cooper (1979) consider that the phenomenon is not all-pervasive, i.e. some teachers are more likely to be affected by their expectations and others not. This perhaps explains some of the inconclusive evidence from research. Cooper, in her review of the literature, concludes that expectations are more likely to maintain student performance than actually change it, but goes on to comment (p.393):-

'Even the maintenance of below-average performance through teacher-expectation effects ought to be the focus of societal concern'.

Rogers feels that there are four factors involved in the operation of expectations: (1) the pupil; (2) the teacher; (3) pressure brought to bear on teachers from the classroom and school structure in which they work; and (4) motivational and self-concept variables. He concludes that the evidence suggests that (p.172):-

'teacher-expectancy effects are more likely to occur (but not exclusively so) when younger pupils are involved, when teachers have formed social expectations for their pupils under conditions likely to lead to the establishment of relatively distant teacher-pupil relationships and under conditions (as yet largely unspecified) where the actions and expressed attitudes of the teacher are most likely to affect pupils' level of motivation and self-concepts.'

### 2.2.8 Contributory factors: Experience and knowledge

There are a wide number of factors which might be related to a teachers' perception of pupils whether they are normal or ESN (M). In Cohen and Manion's (1981) discussion of Hammersley (1977), it is suggested that the social location of the teacher is an important contributory factor. Social location or context of the teacher encompasses the pupils, parents and the local community, colleagues, bureaucratic superordinates, the teacher's home and community and the education system as a whole. These external controls may bring certain constraints on the teaching situation. Hammersley (1977) had argued that although the social location would to an extent control the teacher's activities, teachers' past experience would affect how they accepted those constraints of the teaching situation which were unchangeable, perceived those aspects which could be changed, and how they might affect changes to be carried out. Hammersley saw two dimensions in operation: one of situation control - the structure of possible opportunities; and a second dimension of cultural influence - the structuring of thoughts and perceptions by one's environment (Cohen and Manion, 1981; p.98) Together they would affect various factors relating to the way the teacher managed his/her class, factors such as how the teacher saw his/her role; how the pupils' action was conceptualised; how knowledge was conceptualised; the nature of learning; and the techniques of teaching.

This social analysis of teaching might apply equally to teachers of ESN (M) children or to teachers in normal education with regard to their willingness to accept ESN pupils into their classes. Stephens and Braun (1980) surveyed 795 ordinary teachers of primary and middle grade children in the United States. In all 61 per cent appeared to be willing to accept handicapped children into their classes. The remaining 39 per cent were against intergration. What is of interest from this questionnaire, is that factors not related to willingness/unwillingness were sex and age of teachers, number of years of teaching, having exceptional children in the family, experience in recommending children for special education, or teaching experience in schools with special educational classes. It would appear then that intimate knowledge of ESN children did not appear to be an important fac-

tor. However, factors associated with willingness to accept children were confidence in their ability to teach the handicapped, a belief that the place to educate special children was in normal schools, and a belief that the handicapped can be useful and contributive members of society.

Malekpour (1981) found that special teachers in Tehran had more favourable attitudes to EMR children than regular elementary teachers, but teaching experience, contact and information about these children, coursework on exceptional children, sex and age were not significant variables which influenced attitudes. Feldman and Altman (1985) showed that regular classroom teachers' (N=454) over-riding concern was whether mildly retarded children displayed behaviour problems which would disrupt normal classes, and thus threaten the instructional atmosphere in the classroom for non-retarded pupils. Feldman and Altman suggest that the teacher's ability to handle such programmes may be important factors in considering integrating special children.

Teachers who specialise in teaching ESN children are of course more likely to have greater information about mental handicap than those outside the field. This may favourably affect their attitudes to the children.

To study this question, Efron and Efron (1967) devised a 70 statement questionnaire which subjects had to answer by marking their agreement/disagreement on a six-point continuum. One hundred and fifty-five graduates and 80 undergraduates completed questions related to the moderately mentally retarded (people with IQs of at least 50). A principal component analysis using the Varimax Method revealed six factors: 1) Segregation by institutionalisation; 2) Cultural deprivation; 3) Non-condemnatory etiology; 4) Personal exclusion; 5) Authoritarianism; 6) Hopelessness. By then comparing the answers from: 1) teachers in special education (n=36); 2) students in special education (n=48); 3) teachers and students not in special education (n=92); and 4) people not in the field of education at all (n=26), they found a very clear trend suggesting that teachers and students in special education were less authoritarian, more in favour of integration, prepared to

accept more intimate contact than other groups, and also tended to believe that in many cases retardation was culturally derived.

The result of this study certainly points to the effect of the knowledge about mental retardation on teachers' attitudes, and can be linked to the denotative and connotative implications of the label ESN (Macmillan et al, 1974). Where teachers have some specialist knowledge of what the label implies, their attitudes may be more positive and flexible. On the other hand, Rosenberg (1982) found that teachers in mainstreaming regular education were more optimistic towards mainstreaming than those teachers in special schools, who were described as protective towards their pupils.

However, Stephens and Braun (1980) found that having an exceptional child in the family did not necessarily relate to willingness/unwillingness to accept integrated education. Perhaps the divergence in the findings relates to the kind of knowledge and experience that teachers in special education have compared to that of ordinary teachers with family experience of mental disability. In addition, the former may have strong motivation to work with this group of children. The latter may be in the position where they can accept only the status quo. This suggests that formal knowledge combined with experience may lead to greater confidence and thus more positive attitudes. Hegarty (1982) advocates that early staff involvement in discussion of integration programmes can help these anxieties. Positive attitudes may also be engendered by the use of classroom assistants, inservice training, support outside the classroom and a designated special resources teacher (Clunies-Ross, 1985).

#### 2.2.9 Teachers' Behaviour

Irrespective of whether a teacher's attitudes towards a child are affected by knowing that he or she is retarded, what is also at issue is the extent to which the teacher's behaviour towards the child is affected by his knowledge and perception of the child (favourable or otherwise).

a) Normal Children

Considerable work looking at the link between teacher perceptions and behaviour with normal children has been carried out by Nash (1973) who observed 236 children from 8 classes in an unstreamed primary school. In a further study he followed children from their final year at 5 primary schools to a single comprehensive school. In both studies he was a participant observer in the classroom.

During the first study in a single primary school, Nash observed that in six of the eight classes, teachers used mixed ability groups for teaching. Teaching groups changed with each subject. In the other two classes, there were more apparent "top" and "bottom" tables where those who had highest ability in reading and number comprised the "top table". Irrespective of the seating arrangements, conversation with the children in the mixed ability groups (named by colour) revealed that the children were clearly able to work out for themselves who might be considered in a lower ability group. In addition, when comparing the teacher's ratings of the children's ability (results of which were not given to the children) with the children's assessments of their own ability in relation to their class mates, correlations were at a significant level ( $P < 0.01$  Kendal's tau).

Following on from this, Nash (1973, p.70) argued that Barker-Lunn (1970) had established that teachers' class-grouping practices reflected attitudes towards teaching, and thus presumably their pupils. In order to establish the link between the teachers' attitudes and behaviour, Nash looked at the attitudes of 8 individual teachers in the primary school, using repertory grids, a technique which emerged from Kelly's Personal Construct Theory (PCT). The technique will be discussed more fully later under the "Methodology of Repertory Grids" (Chapter 4.4).

Nash first elicited from each of the teachers ten to 12 dimensions or constructs which they most readily used to describe the children in their classes. Teachers were then asked to rank order the children in their class on each these. Although the constructs from the teachers were varied, there was a core of 3



which could be described as: a) hard-working/lazy; b) mature/immature; and c) well-behaved/ poorly-behaved. As Nash points out this indicated that these primary teachers evaluated the children in their classes in terms of psychological attributes - intention to work, maturity and behaviour, rather than on the child's learning ability (P.23).

Nash then examined the behaviour of the children and their teachers. In his example he analysed the classroom interaction of one highly-rated (favourably-perceived) child, and one low-rated (unfavourably-perceived) child, both of whom were in the same class. This showed how a teacher's attitudes towards a child might be related to the teacher's interaction with the child, and the child's subsequent classroom behaviour. His examples are interesting, but by nature interpretative so that the causal link between attitudes and behaviour is difficult to infer. The teachers may have been evaluating the children's behaviour well, rather than influencing the children's behaviour by their attitudes. In addition, the reliability of the observations is unclear, and should, therefore, be looked at with caution.

In the second part of the study three secondary school teachers and their pupils were found to display similar links. Here it appeared that the teacher's favourable attitudes towards one child was reflected in positive behaviour towards him (marking his book quickly so he did not have to wait, not telling him off by name when he was noisy, and giving him first choice in choosing members of his work group). The child she viewed less favourably was left to wait for materials, offered a new task which was then immediately taken away from him, and eventually told off for not getting on, which to an extent had been caused by her own poor class management. Nash concluded from this that teacher/child interaction related in part to the teacher's favourable/unfavourable perceptions of children.

Nash further hypothesized:-

"..(that) perceptions of individual children by different teachers might vary. It seemed important to know this since if a child was perceived, say, favourably by one teacher and unfavourably by another, it should be possible to determine

whether the child's behaviour in the classrooms of the two teachers would differ." (P.42)

Using similar methods he analyzed the behaviour of children in three classes in the secondary school along with these three teachers' attitudes. Where children were perceived unfavourably by one teacher but not by another, their observed interaction with their teacher in the classrooms reflected the teacher's attitudes.

A general weakness of Nash's findings is that there are no measures of specific interactions between children and their teachers, nor an indication of their reliability. Yet as Pilling and Pringle (1978) argue, the analysis of individual case studies shows how teachers may create one social environment for a child they perceive favourably and another for a child they perceive unfavourably.

The link between teachers' perception and behaviour has more recently been considered by St. George (1983). Looking at 90 9-year olds in their classrooms in New Zealand, she found that the Polynesian minority group were perceived less favourably than the Pakeha (white) majority by their teacher. Classroom behaviour indicated there was no evidence of overt discrimination in teacher-pupil interaction between the 2 groups of children, although the majority of Pakehas consistently performed better in achievement tests. St. George concludes, however, that negative perceptions and expectations for minority Polynesian children led to their being treated in a similar manner to others of expected low ability, which was reflected in their academic achievements.

An inference from this study is that if teachers' negative perceptions of children are detrimental, the perjorative attitudes will not necessarily be obvious in gross behaviour categories such as those used by St. George (e.g. public response opportunities, work related contacts, procedural contacts and behaviour evaluations) such as measured in this study.

A more detailed analysis by Fry (1983) using 15 teacher and pupil behaviour measures, however, was sensitive to changing interactions between 30 teachers and either problem or non-problem 5th and 6th grade children. Results indicated that over the course of

4 months teachers gave less sustaining feedback and more negative affect to problem than non-problem children. Comparably, the problem children tended to display an increase in misdemeanours and a decline in sustained attention. Thus there appeared to an interaction between teacher and child behaviours. These results would indeed give tentative support to the 'Pygmalion' research, i.e. that where expectations occur they may affect the interactions between teacher and child, and that where the expectations are low teachers may act towards pupils in a relatively negative way.

b) ESN (M) Children

In their review of studies of teacher/handicapped children interactions, Thompson, White and Morgan (1982) felt that evidence of consistent patterns of behaviour has been contradictory, and that conclusions were often clouded by design and methodological weaknesses in various studies. Their own work looked at the way teachers interacted with mainstreamed mildly handicapped students by a method of direct observations. Unlike some researchers they reviewed (such as Brophy and Good, 1970), they found that mildly handicapped students (third-graders) were involved in more interactions than either high- or low-achieving non-handicapped students. Brophy and Good had found that high-achieving students received more praise, and support, from teachers than low-achieving students. In general, Thompson et al. (1982) conclude that their own and other studies show that there is evidence that teacher-student interaction varies between high- and low-achieving non-handicapped, learning disorder (mildly handicapped) and behaviourally handicapped students, but felt no single group was provided with a more effective learning environment.

Kurtz, Harrison, Neisworth and Jones (1977) investigated the interactive effect of labelling and teacher behaviour towards those labelled. Their subjects were 12 randomly selected student teachers (6 men and 6 women) who were assigned to the experimental (labelled) or control (non-labelled) groups; and 12 preschool children (7 boys, and 5 girls) with a mean age of 5.5 years. Each teacher was asked to play with and read to one of the children, and the interaction was videotaped through a one-way screen.

Prior to meeting the child, each teacher read a three-sentence description of the child. These descriptions were all identical except in six cases when the child was labelled 'mentally handicapped'. None of the children were handicapped.

Analysis of the student teachers' non-verbal behaviour using a 2 tailed t-test revealed the experimental group displayed a greater number of body leans towards the child ( $P < 0.05$ ). 'Body lean' involved, among other things, the teacher leaning towards the child to show a picture or point to something in the book. Frequency of touching was also recorded, but was of such low frequency that analysis was impossible.

Kurtz et al argue that the results indicate that the student teachers who had read descriptions of the child labelled as mentally retarded were more immediate in showing less social distance towards those children, as indicated by the number of body leans. If the number of body leans can be taken as an indication of immediacy, then it would appear that in this case the label did bias the teachers' behaviour perhaps, as the authors suggest, by teachers displaying compensatory behaviour towards those children they believed to be handicapped. However, the small sample size must limit generalisations.

Forness, Guthrie and MacMillan's (1982) study of the effect of classroom environments on behaviour in EMR children used the Classroom Environment Scale of Moos et al (1974) in assessing classroom structure, support and teacher climate. Observations of the children's behaviour in four precoded categories (verbal positive, attend, not attend and disrupt) were also made.

In looking at 28 EMR classes with 328 children, it appeared that in classroom structures where teachers were seen as supportive (in terms of high scores in involvement, affiliation and teacher support, but with moderate scores in classroom organisation and below average scores in teacher control), there was high attending behaviour and low off-task behaviour. In contrast, where the Classroom Environment Scale responses showed only moderate scores in teacher control, order and organisation but low involvement, children were inattentive and tended to be disruptive.

Forness et al (1982) conclude that the presence or absence of psychological dimensions in a classroom such as support, involvement, clarity and flexibility, and friendliness appear to affect the type of behaviour displayed by EMR children, especially their attendance to the task in hand. This may be important because the misbehaviour of EMR children appears to interact with the labelling effect. Gottlieb (1978) found that although EMR children did not engage in more misbehaviour than non-handicapped peers, misbehaviour of EMR children led to an increased lack of acceptance by other children.

Considering these findings, in conjunction with those of Nash and others, it may be possible to infer that the psychological climate of teaching methods in a particular classroom will be affected by the individual teacher's approach both to teaching and to his/her pupils. It is, in fact, this variation between teachers' styles which may well account for the differences in studies reported.

#### 2.2.10 Comparison of Special and Normal Children's classroom interactions

Consideration of a few studies comparing pupil-teacher interaction in various classrooms will end this section of the literature review.

McCulloch's thesis (1981) indicated that teachers in both special and regular education tended to ascribe less intentionality and responsibility to mentally handicapped than to non-handicapped children in stories where the outcome was in some way deleterious due to the action of a child depicted in the story. Mentally handicapped children were shown more leniency than their normal peers, i.e. there was positive discrimination towards the handicapped group in terms of their social behaviour.

Conversely, looking at academic skills, Thurman et al (1982) found that special education teachers consistently rated EMR children's educational achievement (in terms of mathematic skills) as significantly lower than that of normal children (matched on mental age), although the children's performance did not differ between the two groups. A case of negative discrimination.

Raber and Weisz (1981) looked at pupil-teacher interactions in Grade 3 and 4 classrooms for EMR children. Using the Flanders (1964) Categories for Interaction Analysis, the authors found that helplessness-inducing patterns of behaviour were more pronounced among retarded than non-retarded children. EMR children also tended to receive more negative feedback than non-retarded children from teachers.

In contrast, Semmel, Sitko and Kreider (1973) reviewing previous work, point out that teachers of EMR children had been observed to use more praise and encouragement with their pupils than regular class teachers. Regular class teachers gave more directions to pupils than special class teachers. The importance of this is underlined by Semmel et al's finding (1973) that where TMR children were found to make relatively greater gains in communication skills, their teachers' tended to be less restrictive. In other words, they gave fewer directions and criticised their pupils less often. The implication is that praise and encouragement and a less restrictive teaching style may foster communication skills.

A comparison of teachers' behaviour towards groups of children with varying degrees of handicap was made by Bryan and Wheeler (1976). Looking only at teacher behaviours to normal and learning disabled children (with particular reference to the present study), learning disabled children were involved in the greatest number of completed interactions (68%), the fewest number of initiations by the teacher to the groups as a whole (8%), the greatest number of interactions to which children responded (60%) and the most frequent occurrence of continuous communications between children and teachers. (The other groups were normal children and TMR children.) The authors conclude that teachers in classes for learning disabled (and TMR) children related primarily to children as individuals with a higher rate of responsiveness from children, as compared with normal children. Factors related to this pattern were seen to be class size (i.e. smaller classes gave greater opportunity for individual interaction) and teachers' personality.

Forness, Guthrie and MacMillan (1981) reviewing their previous work and that of other writers, conclude that children with learning difficulties are characterized by lower levels of attendance and patterns of behaviour which may predict educational risk. Comparing 900 EMR with Educationally Handicapped (EH) and TMR children (the latter from both home and institutions) in their classrooms, the EMR group were involved in less verbal interactions than the other children, and teachers also responded to them least of the 4 groups of children. However, they were relatively high on on-task behaviour. Hackney (1983) has found that most disruptive or most alert and teacher-orientated children attract most attention. Non-communicating and non-destructive children who made least impression on the environment attracted little attention.

This section shows that normal children and children with learning difficulties tend to experience different behavioural environments in their classrooms, and also display different behaviours. Results indicate that while they may receive more positive feedback in some classrooms than normal children (Semmel et al, 1983), this is not always the case. Class size may affect teacher-pupil interactions, but Forness et al (1981) suggest that the quiet EMR pupil may be left to his/her own devices.

#### 2.2.11 Summary and Conclusions

Ensher (1973) had suggested an association between teachers' attitudes and behaviour to their pupils in special education which adversely affected the children's behaviour. However, looking at children in normal education, the overall conclusion from a number of studies points to only a weak link between teachers' behaviour and their attitudes when researchers have tried to manipulate teacher expectations. The methodological criticism of Rosenthal and Jacobson's work (1968) appears to have some validity, and certainly it is difficult to establish whether teachers' expectations have been raised simply by manipulating children's names on a list. Even so, exact replications of this research would suggest very tentative support for the "Pygmalion" hypothesis, or at least acknowledge that there may be a potential for teacher expectancy effect in some classes (Rogers, 1982). Pilling and Pringle (1978)

propose that much adverse criticism arising from the Rosenthal and Jacobson study (1968) may have been caused by a realization of the full implications of the research. It is suggested that where expectations occur naturally the links may be stronger than in many manipulated studies, particularly in maintaining children's behaviour. This effect has been illustrated by Nash in a number of studies of children and their teachers in primary and secondary schools.

Many contributory factors affect classroom management and thus a teacher's attitudes towards his/her pupils. Factors are complex (Cohen and Manion, 1980), and range from environmental and social factors to the individual teacher's past experience. They may account for individual teacher's different approaches to teaching as exemplified in the streamed or non-streamed classes in Nash's progressive primary school (1973). The interplay of these various factors may go some way to explain some of the different and contradictory results which research has revealed.

The case study approach adopted by Nash (1973), using the teachers' own dimensions to describe the children in their classes and direct observations of the classroom interaction between teacher and child, has shown some evidence of the link between a teacher's perception of a child and the behaviour displayed by the child and teacher. It was also clear that children were aware of how teachers perceived their position in the class. When they were perceived favourably by a teacher, their behaviour in that teacher's classroom was different from their behaviour in the classroom of a teacher who saw them less favourably. This approach, although detailed and time-consuming, with adequate reliability studies, points to a way of considering the complex process of the effect of expectations and teacher behaviour towards handicapped children in school. The approach is supported by the work of Fry (1983), which suggests that negative feedback from teachers correlates with increased misdemeanours in children with problem behaviour.

In studies on ESN (M) children it has been less easy to establish a link between attitudes, expectations and behaviour (Schwartz and



Cook, 1972; Raber and Weisz, 1981; Thompson et al., 1982). If Ensher's "clinically derived" conclusion is to be confirmed, it may be that a study at the detailed level used by Nash, employing teachers' own dimensions to describe their pupils, is needed to tease out the steps which link teacher expectations and attitudes to the child's subsequent behaviour. The work of Kurtz et al (1977) indicated that rudimentary information about a child labelled as mentally retarded may affect a teacher's behaviour. More formal knowledge (e.g. teaching in special education) appears to affect expressed attitudes (Efron and Efron, 1967).

Semmel et al (1973) showed that EMR children receive more praise and encouragement and less direction in the classroom than their normal peers. In addition they tend to be more involved in individual than group verbal initiations from their teachers than normal children - in part a reflection of class size. This contrasted with Raber and Weisz (1981) who found that mentally handicapped children tended to receive more negative feedback than normal children, confirming Ensher's original contention (1973).

EMR children were also found to be least involved in verbal interactions with their teachers when compared to EH and TMR children. This all seems to indicate that the behaviour these children may exhibit and the social environment of their classrooms differs between different types of children in terms of their learning difficulties and other variables.

The conclusion to be drawn from the research is important with regard to teacher/handicapped child interaction in the classroom. For, if a teacher's expectations are at least maintaining a level of behaviour and performance in a child, it is possible that the child may be aware of this (as Nash's study has shown) and feel that his own behaviour is not contingent on his efforts. This does not appear to be a universal effect, but when it is the case, as Raber and Weisz's study (1981) suggests it can be, then teachers' expectations formed from their own individual experiences, the educational climate of the school in which they work, and the prevailing social attitudes to the handicapped, may affect handicapped children's behaviour in the classroom.

## 2.3 PARENT ATTITUDES AND PERCEPTIONS

### 2.3.1 Introduction

In the discussion of teacher perceptions of the children with learning difficulties, it may be assumed that the teachers who specialise in teaching ESN children, do so because they have a particular interest in this area of education. It is also likely, but not necessarily, the case that when they first have contact with such children in the classroom, they have acquired some formal knowledge about the meaning and implications of handicap.

On the other hand, parents of children who are termed ESN (M) may have no such aptitude for dealing with the possible inherent problems in raising children with learning difficulties, and their knowledge of cognitive impairments may be scant or non-existent.

The literature relating to teacher expectations has indicated mild support for naturally-occurring expectations at least maintaining children's behaviour in the classroom. This may have important implications for all children, particularly those with learning difficulties. At the same time, it is because children spend more time at home than at school during their early life that parental attitudes and expectations would also seem to be important factors in children's development. Do they also maintain children's behaviour at a level below children's potential?

In considering the research on parental perceptions etc. it is worth remembering that the results of all studies in this area are axiomatically compared with the views of professionals (whether researchers or clinicians etc.) Thus, although statements are made about parents' under- or over-estimating their children's abilities, what is in effect being stated is that parents agree or do not agree with professional ratings - a different thing altogether.

Mitchell (1976), in his review of research on parent-child interactions, concludes that evidence suggests that:

'...there can be little doubt that mentally handicapped children are the source and recipients of parental behaviours very different from those emitted and received by non-mentally handicapped children of similar chronological age.' (p.180).

Hannam (1975) has also suggested that this is the case, although both authors would appear to be looking at the more severely rather than just the mildly handicapped.

### 2.3.2 General Attitudes

This section begins with two independent and separate studies carried out on either side of the Atlantic, which illustrate general trends of concern.

The first was conducted by Condell (1966) who investigated the attitudes towards mental retardation of parents living in a rural setting in West Minnesota. Sixty-seven parents out of 152 who had children evaluated by a Child Development Centre as mentally retarded, completed a modified form of the Thurston Sentence Completion Form (TSCF) (Thurston, 1959). The 40 items were broken down into the following categories:-

- 1) Reactions and concerns of parents.
- 2) Attitudes regarding the child's satisfaction-discomfiture.
- 3) Reaction of brothers and sisters.
- 4) Reactions of community, friends and neighbours.
- 5) Attitudes toward the Centre and staff.

Looking at the majority responses for each of the 40 questions, only three questions received over 50 per cent agreement. Condell interprets this as a lack of high parental agreement on the items of the TSCF. One of the overriding impressions reading through the majority of responses in the TSCF is that parents expressed considerable concern for the future. For example:-

"My biggest fear is...the future" (35%)

"I wonder...what the future holds" (47%).

On the other hand, parents were also pleased with their neighbour's reaction to their child, and hoped that the child's behaviour, presumably when slightly different from normal, would be overlooked (37 %). Twenty-nine per cent said that what bothered them most about their child was his social behaviour. With regard to social behaviour, which one might anticipate to be a function of this interaction with neighbours and family etc. as well as a certain amount of discipline, parents felt that:-

"The most common mistake others make in raising a retarded child is...overprotection and isolation of the child" (45 %).

In view of the fact that parents themselves saw their own attempts to discipline as causing the greatest disturbance in the child's behaviour (27%), one may wonder if they felt that they also tended to overprotect and isolate their own child, or whether this was just an error in other people.

With no statistical analysis, and no information about the type or frequency of other responses to the scales, the study is at its best only descriptive of general parental feelings. Considering these children were described as retarded, by definition some would have academic and intellectual deficits. It is, therefore, interesting that parents appeared to be more concerned about the child's social, rather than academic behaviour. This may have been because 53% expressed satisfaction with the local school programme.

In contrast to the rural setting of West Wisconsin, Wishart, Bidder and Gray (1980) considered in some detail parental attitudes towards their retarded children who were attached to the South Glamorgan Home Advisory Services in Wales. Sixty-one families of children (28 boys and 33 girls) between the ages of four and 126 months (mean 52.9) were asked to complete attitude and behaviour rating scales. The parents were grouped according to their child's disability: 1) Down's Syndrome (N=27); 2) Non-specific developmental lag and Development Quotient (DQ) of over 65 (N=13); 3) Those with a DQ of less than 65 with/without some limb dysfunction (N=13); and 4) Control group - obtained by asking parents of handicapped children to name one family they knew whose child had the same chronological age and number of siblings as their son or daughter.

It was hoped that this might identify different areas of concern in connection with the three areas of handicap described.

Each parent was sent three questionnaires (one for the past, one for the present, and one for the future) which consisted of 17 attitudinal and 15 child-descriptive scales using a modified

semantic differential technique. Parents were also asked to rate their personal preference towards different possible services.

Of those given the questionnaire, 13 in group 1, 11 in group 2, 13 in group 3 and 25 controls completed and returned the questionnaire. Results showed there was a consistent trend for parents to be hopeful about the future, except group 3 mothers who anticipated more temper tantrums in the future ( $P < 0.02$ ), and group 1 fathers who expected their children be become less easy to cuddle ( $P < 0.05$ ). This feeling of optimism for the future appears contradictory to Condell's finding which indicated that parents feared for the future. However, although they anticipate improvements, this may not necessarily stop parents worrying about the future.

Generally, mothers and fathers agreed in their replies relating to the child descriptive labels. This could either indicate parental agreement or collaboration, as parents were sent questionnaires about the child to answer at home.

Behaviours such as sleep and eating were not described differently by the parents of the three handicapped groups and parents of normal children. Wishart et al (1980) comment that it may be that professionals have felt these are problem areas in the past, when indeed parents do not consider them in these terms. Parents of group 3 children saw their children as the most mentally disturbed. As a whole, Group 3 children were seen as most different from the control group, which might have been expected as they were the most handicapped.

Although parents indicated their past attitudes had been less favourable, there was also a consistent trend towards increasingly favourable attitudes in the future. In addition, mothers and fathers differed more widely in their attitudes towards the child than in their descriptions of the child, but, as with the child description scales, the greatest differences were found between attitudes of parents of the normal and most handicapped group.

The advantages of this study over that by Condell, is that, by breaking down the category mental retardation into subgroups, it is possible to appreciate how the degree of handicap affects

parental attitudes, and hopes for the future. However the positive hopes for the future that parents express, both on their descriptions of the child's behaviour and their attitudes as measured by the study, generally appear to cut across all four groups.

The results of these two studies suggest that, despite some reservations about the future (Condell,1966), parents tend to believe that their children's behaviour will improve considerably in the future; and this is irrespective of the degree of handicap (Wishart et al,1980). Wishart also shows that attitudes would appear to become more optimistic with time.

### 2.3.3 Parents' Perceptions and Expectations of Children's Performance

Unlike the above studies, some reseachers have compared parents' perceptions with the child's assessed behaviour.

Wolfensberger and Kurtz (1971) looked into parental concurrent and predictive 'realism' about their child's attainments in certain developmental areas, having argued that much of the literature on parental misperceptions of the abilities of mentally handicapped children was impressionistic and not based on empirical evidence. They studied 117 mentally retarded children (68 boys and 49 girls) between the ages of 6 months and 15½ years (mean 5.76; SD 3.41 years) with IQs ranging from 10 to 111 (mean 58.54; SD 19.59). The parents came from a wide social background in the United States.

Two instruments were developed: the Parent Realism Assessment Technique (PRAT) and Parent Expectation of Child Development Technique (PECDT). The areas covered by the tests were: a) verbal and preverbal communication; b) gross motor development and coordination; c) manual dexterity and eye-hand coordination; d) self help skills; e) occupation; f) general intellectual functioning; and g) academic achievement. [The test retest reliabilities were almost all between 0.95 and 1.00 at a significance of  $P < 0.01$ .] The comparative figure for the parents' future prediction was based on computations from the children's present scores. In other words this was a predictive score taking into account the child's present ability and projecting his future development.

Parents were asked to predict the age level at which their children could perform on a number of tasks both for now and at the child's maturity. The children were then assessed on the tasks; the two scores were compared and 100 added as a constant. Scores above 100 indicated parental overestimation; and under 100 as underestimation. It was felt that any scores within the range of 85 to 115 (with 100 as accurate) should be considered as within the range of realism.

The results from comparisons of the children's assessment with parents' predictions are summarised in Table 2.1 below, and show that, within the stated range of realism, parents were consistently accurate in their assessments of their children's present behaviour levels. However, with regard to behaviour levels at maturity, parents systematically expected their children to reach levels of normality which the estimations from the actual scores of their present behaviour did not predict. In other words, although the mean IQ of the group was 58.54, 72% of parents predicted their children would have IQ of 91 to 127 at maturity. 86% of the children were expected to read at a level beyond their mental age projection at maturity.

TABLE 2.1

Differences between Concurrent (PRAT) and Predictive (PECDT) Realism Scores in eight areas of Child Behaviour

		PRAT			
Area	Area Content	Mean	SD	N	
1	Auditory decoding	112.08	24.13	124	
2	Vocal-verbal encoding	116.63	25.45	134	
3	Gross Motor	104.04	22.63	138	
4	Manual dexterity	109.84	21.30	139	
5	Self-Help	95.95	22.20	160	
6	Occupation	96.27	22.84	161	
7	Global intelligence	108.55	14.67	94	
8	Achievement (reading)	98.73	5.76	30	

		PECDT					
Area	Area Content	Mean	SD	N	Diff.	t	
1	Auditory decoding	141.60	30.54	114	29.52	8.306**	
2	Vocal-verbal encoding	144.59	25.18	124	27.96	8.913**	
3	Gross Motor	122.30	23.42	129	18.26	6.477**	
4	Manual dexterity	133.66	23.43	127	23.82	8.697**	
5	Self-Help	120.05	29.85	144	24.10	8.089**	
6	Occupation	115.38	22.19	143	19.11	7.384**	
7	Global intelligence	127.83	16.97	86	19.28	8.135**	
8	Achievement (reading)	137.83	45.45	23	39.10	4.600**	

\*\*p = <0.01

Within the developmental areas of this study, the authors appear to refute the belief that parents are unrealistic about their retarded children on present levels of functioning. However, there seems strong evidence that parents do expect their children to make "vast improvements" (P.59) in the future, particularly in academic and intellectual areas, but least so in occupation and self-help skills. This confirms the findings of Wishart et al (1980) already reviewed.

Wolfensberger and Kurtz point out a number of short-comings of their own study: 1) the questionable validity of the instruments; i.e. Vineland is now seen to have limited use; 2) the testing of the children and collection of demographic variables was not under the control of the authors and so was partial and of inconsistent quality; 3) some procedures were evolved as the project was progressing thus undermining the consistency of the testing even further.

In addition, as compared with some of the other studies reviewed here, the range of the children's ages and IQ was very wide. Even



so, the results would seem to support the hypothesis that parents are realistic about their children's current abilities, but over-optimistic about the future.

In an interesting comparative study in Israel, Weller, Costeff, Cohen and Rahman (1974) looked at a number of social variables - social class (middle or lower), country of origin (Jews from Europe or from the East) and level of retardation (Mild: IQ 50-69 and severe: IQ 50 or less) - and how these social variables related to the perception and acceptance of a retarded child by his mother.

The children who were selected had all been carefully examined by a centre for the retarded and these assessments were used as the comparative figures. Mothers of the 76 children were interviewed. The questionnaires were scored by two independent judges on: 1) feelings of guilt; 2) accurate perception of the child's abilities; and 3) acceptance/rejection. Middle class parents and those parents with children who were more retarded were more accurate in the perception of their children than lower class parents and those with a less handicapped child. Neither social class nor level of retardation related to parents' feelings of guilt or acceptance of the child.

These results only partially agree with those of Wolfensberger and Kurtz (1971). This may well be a function of the different areas covered by the testing. Wolfensberger and Kurtz asked for predicted performance on specific tasks, while Weller et al tended to ask more general questions (e.g. "Do you think your son needs special treatment, such as institution, school?").

Pedulla (1975) has considered mothers' perceptions of their 2-12 year old handicapped children using the Wolfensberger and Kurtz' techniques for measures of realism. She found that not only did 80% of mothers overestimate the children's future levels of adult functioning, but that 40% also significantly overestimated their children's concurrent level of functioning, compared to professional assessments of the children's abilities.

Pedulla also looked at factors which accounted for the variation in mothers' realism scores. In contrast to Weller et al., higher

socio-economic status mothers were less realistic than lower socio-economic status mothers. It is not clear why Pedulla's and Weller at al's results differ, although one may hypothesise that the disparity may be related to cultural factors (Israel versus USA). However, her results with regard to the link between degree of handicap and realism scores agreed with those of Wolfsenberger and Kurtz, that mothers of less retarded children were more accurate than those of the more retarded.

Perhaps what is of greater interest in Pedulla's research is that she found that information about the children's limitations had no effect on mothers' mean realism scores, since some mothers became more and some less realistic after being given information. She hypothesised that the mother's emotional adjustment might be an important factor, i.e. well-adjusted mothers might assimilate information and adjust their perceptions better than less well-adjusted mothers. Measuring mothers' emotional adjustment on the California Psychological Inventory's V-Scale (Nichols and Schnell, 1963), she found this to be the case.

Aserinsky (1981) has also found that when comparing 22 handicapped and 24 normal children's scores on the WISC, mothers of handicapped children were not more or less accurate than mothers of normal children in predicting children's performance, although they are considerably more variable in their ratings (i.e. some were far from accurate). At the same time, mothers' global self-concept and emotional attitudes were unrelated to their error-making. However, mothers of handicapped children whose self-esteem varied highly between situations were less accurate than those with a stable self-esteem across situations. The reverse was true for the mothers of normal children.

These findings underline the important fact that, as with teachers, there may be subtle variables which affect the different ways in which mothers perceive their handicapped children.

#### 2.3.4 Relationship between Parental Perceptions and Children's Behaviour

McEvoy and McConkey (1983) interviewed 67 mothers of moderately and severely mentally handicapped children between the ages of 2 and 15 years. Among their findings pertinent to this thesis is that very few of these children had regular daily contact with neighbourhood peers and 82 % had never had the experience at all. As play with adults and peers is an important way of learning social and cognitive skills, this lack of peer contact is likely to be important. McEvoy and McConkey point out that mothers in fact appreciated the importance of peer play, but had generally made few efforts to bring this about. This was seen to be due to a variety of causes, some genuine (traffic and the roads in the area) but others related to mothers' "over-protectiveness" and uncertainty. This finding links in with the relationship between parental perceptions and children's behaviour, and illustrates how parental behaviour may affect children's development.

Following the findings of Wolfensberger and Kurtz (1970), Organist (1971) investigated the accuracy of parental predictions of educationally mentally retarded (EMR) children's behaviours against the actual behaviour of the adolescents.

Organist looked at parents' predictions for the maximum behaviour levels of their EMR children at maturity, and compared this with the child's future ability, based on a 'growth curve' of ability computed from the child's present scores on various tests. Measures of parental encouragement of specific child behaviours and demographic variables were also made.

Parents' expectations and predictions were measured using an expanded form of Wolfensberger's and Kurtz's PECDT. In nearly all cases, both parents were interviewed separately by trained interviewers.

The children's abilities were compiled from: a) Vineland Social Maturity Scales. b) Metropolitan Academic Test (MAT) for academic achievement in reading and maths; and c) Slosson IQ Test (SIT) for global intellectual functioning.

To assess the expected maximum life behaviour levels at maturity for each child, the scores of the child's present abilities were computed and a growth curve was drawn. The Validation Derived Quotients (VDQs) thus obtained were compared with parental predictions to assess parent's accuracy of prediction. The score of 100 was added as a constant. This meant that where the difference figure was over 100, parental overestimation was presumed, and where a score of under 100 was found parental underestimation was presumed. The VDQs were in themselves only informed predictions which did not take into account unexpected developments and delays in an individual child's behaviour. However, Organist argued that the VDQs were not crucial to the study, although important in giving some sort of reference to parents' responses.

A Likert-type scale in the form of a Q-sort (42 statements into 7 piles) was used to assess what specific child behaviours parents encouraged and stressed (rather than hoped or wished for). The 42 statements were selected with regard to: a) Intellectual and/or academic skills. b) Vocational and occupational skills. c) Personal and social skills.

Subjects were adolescents from an EMR population in two large cities in Wisconsin, aged between 14 and 20 years (average age 17.5). In all there were 29 girls and 47 boys.

Organist anticipated there would be: 1) a positive relationship between paternal (and maternal) expectancies and patterns of paternal (and maternal) encouragement of specific child behaviours; 2) a positive relationship between paternal (and maternal) encouragement patterns and the children's current behavioural status; 3) a positive relationship between paternal (and maternal) expectancies and the children's current behavioural status; and 4) an interrelationship of parental, family and child demographic variables, parental expectancies and parental encouragement patterns of children's behavioural status.

In general, results from comparisons of the figures were varied, but I shall comment here mainly on those with direct relevance to the present study.

Firstly, as with Wolfensberger and Kurtz (1970), Organist found that, overall, both fathers and mothers tended to overestimate their child's future abilities. Table 2.2 taken from the study illustrates this point. It is interesting, with particular relation to the present study, that both parents underestimated the future personal and social responsibility levels that children would reach at maturity. This was in striking contrast to the ratings for IQ which were 128.5 and 125.5 for mothers and fathers respectively. This may well be interpreted as showing that parents were being optimistic in predicting intellectual and academic skills in an age when such skills are so highly valued. When it comes to the personal and social skills, parents may be showing a natural concern about their children's ability to cope based on their knowledge of the children's present inadequacies.

TABLE 2.2

MEAN, SATANDARD DEVIATION AND RANGE OF PARENTAL DISCREPANCY SCORES

BEHAVIOURAL AREA	MOTHER				FATHER			
	Mean	SD	Range	N	Mean	SD	Range	N
Intelligence	128.5	16.5	88-166	74	125.5	17.9	88-174	72
Reading achievement	102.8	2.3	99-109	71	103.4	2.2	99-108	49
Maths achievement	102.2	2.4	94-107	71	102.8	2.4	99-109	48
Occupation	101.9	15.4	47-137	74	100.4	22.7	36-148	52
Personal-social responsibility	*93.1	19.9	47-128	74	95.6	23.3	42-137	52

\*  $P < 0.05$

(Taken from: Organist, J.E. (1971): "The relationship between parental expectations and the behaviour of mildly retarded adolescents. Unpublished PhD. Thesis, University of Wisconsin.)

Turning to the research questions, there appeared to be no statistically significant relationship between parental expectancies and parental encouragement pattern scores. Within the framework of Cognitive Dissonance Theory, from which he viewed the study, Organist interpreted this result as indicating that parents responded to society's norms and values, rather than their own expectancies, when encouraging their children. Thus, although

parents may be in a state of dissonance, because they have a retarded child whom they expect will one day perform at a normal level, they do not reduce their dissonance by changing the ways in which they encourage their child's behaviour. In other words, they do not appear to encourage the kind of behaviour and skills they hope their child will attain in later life. Organist reported that the more they overestimated (in relation to the VDQs) the less likely they were to encourage these behaviours.

As Organist comments, it is disconcerting that parental expectancies are not apparently related to their encouragement patterns. The results would suggest that the two sets of behaviour are independent. At the same time, it may well be the result of inadequate measures of either (or both) parents' predictions or their encouragement patterns.

Here it may be relevant to ask what variables might control the parents' predictions of their child's performance at maturity. It is possible that, when asked to predict, parents were in fact giving their hopes and wishes rather than what they really expected. Indeed it might be difficult to exclude an element of hope when trying to be "realistic". Secondly, the way they encouraged their children to behave may to an extent have been regulated by the child's past response or lack of response to encouragement. In other words, although they may have tried to encourage "independence", they may have been discouraged by past failure, and yet continue to hold a hope for future improvement.

With regard to the second research question (relationship between parental encouragement patterns and the children's current behavioural status) there was only one significant positive correlation - maternal encouragement of academic behaviour was found to be related to the child's intellectual status. Other significant correlations (negative) were difficult to interpret.

The findings with regard to the third research question (relationship between parental expectancy and the children's behavioural status) were confused. The size of a few significant inverse correlations were taken to indicate that parents of lower status retarded children possibly made greater overestimations.

Organist interpreted this as showing that the tendency towards normalization appeared to be a greater influence on the parents' predictions, than evidence from objective data about the child. Overall he concluded:-

"The supposition that parental expectancies are transmitted to, and perceived by, retarded children is not supported by the data..." (P.71)

Finally, looking at the interrelationship of demographic variables, parent expectancies, and parental encouragement patterns of children's behavioural status, results were mixed. There appeared to be a tendency for the better educated parents of higher socio-economic status to be more accurate in their predictions (particularly in connection with the achievement areas, i.e. reading and maths.). There was a negative relation between maternal expectancy discrepancies for personal-social skills and the mother's educational levels ( $P.<0.05$ ). No significant correlations with the child's behavioural status were found.

The overall finding in the study, that parents overestimated academic and intellectual skills of mildly retarded adolescents, has already been interpreted as being partially due to the present cultural emphasis on these skills in modern life. Even so, the discrepancies in this study are less than those found by Wolfensberger and Kurtz. This might be explained by the fact that Wolfensberger and Kurtz looked at younger, more handicapped children. It is possible that when the children are younger, even if they are more retarded, parents' hopes may be very unrealistic as the period in which their child can "catch up" appears to be quite long. As the child becomes older and that period shorter, parents may begin to perceive that their earlier expectations for the child may not be realized.

The important finding with regard to the present thesis is that, despite overestimating academic and intellectual skills, parents - particularly mothers - underestimated personal and social skills. However, this should be seen within the limitations of the study. The scale used to measure parents' predictions for personal and social skills had had no reliability tests and is therefore

questionable. Another important point is that the estimated maximum behavioural levels for the children are only estimates, although based on present tests. While the growth curve drawn from present tests is unlikely to be altogether inaccurate it may not take into account any later exceptional progress the child may make.

Despite these limitations, however, the discrepancy between parents' predictions and the estimated maximum behavioural status at maturity is interesting, particularly in the context of the overestimation of the academic and intellectual predictions by parents.

It may be difficult to accept that there is no relationship at all between the parents' patterns of encouragement and their expectations. As Organist points out, the scale used to measure patterns of parental encouragement was experimental. The 42 variables for sorting on the Likert-type scale may not have included all encouragement behaviours. Secondly, parental reports of what they do may differ to a degree from their actual behaviour. However, the tentative implication that Organist draws from the study, that inaccurate (over optimistic) parental expectancies cannot be presumed to be deleterious to the child's development, would appear to be acceptable from the results of this study.

A study of 180 parents of 8 to 12 year old severely and educable mentally retarded children in Puerto Rico (Nieves-Torres, 1983) found a direct relationship of parents' rejection and overprotective attitudes with social status. The higher the social status of the family, the greater was rejection and overprotection towards the children, although there was no statistically significant relationship between parents' overprotection and rejection and children's social competence. In addition, the higher the social status of the parents of the severely retarded group, the lower the social competence of the children. This result did not hold for the educable group.

The question of the relationship between parental overprotectiveness and the child's competence in selected life skills



has been considered further by Landman (1978). Landman looked at this area within the framework of Levy's theory of maternal overprotection (1943). Levy (cited in Landman, 1978) had suggested that there are three major criteria of overprotection: a) excessive contact, b) infantilization ; and c) prevention of independent behaviour. There are two forms of overprotection which then ensue from these criteria. Firstly, when overprotection takes the form of over indulgence and subservience to the child's demands, this allows the child to be disobedient, impudent, tyrannical and prone to temper tantrums when he/she does not get his/her way. Secondly, overprotection may be realized by a parent who is dominating and controlling, causing a child to be excessively submissive, obedient, timid, passive and dependent.

Reviewing the literature on overprotection, Landman found that most authors agreed with Levy. He reviewed the research into the possible causes of overprotectiveness, such as parental anxiety and exaggerated feelings of compassion, parental discomfort when they see their child struggling with learning, or unrealistic fears about possible dangers in exposing retarded children to the risks of everyday life.

It is difficult to differentiate between desirable protectiveness and overprotectiveness. There is the natural feeling of parental concern. Mentally handicapped children may find normal situations more threatening than normal children and need more protection. They may often need to be taught things which most people pick up naturally. In new situations, they may be unable to make as good judgments as normal children, and thus cause displeasure which, in turn causes frustration and embarrassment. To find the balance between the natural desire to protect those who may be more vulnerable to life's demands, and protectiveness which actually prevents the handicapped learning how to cope with some of those demands, is not easy. Landman felt that many handicapped people who had been considered to have a good prognosis for living in the community and adjusting to life generally were later found to be living in relative poverty and dependent on "...benefactors to cope with day-to-day living tasks."

By assuming that some of his group of retarded adolescents were over-protected, Landman pointed out that some would be the least protected. Least protected need not automatically imply under-protected. It can be seen that to give children the opportunity to succeed in the face of failure, may lead to increased motivation towards early independence and higher levels of achievement. On the other hand, if children are really underprotected by being exposed to demands for independence too early, they may learn to fear failure rather than hope for success. This could then impede progress.

Landman focussed his own study on the "over-protected adolescent" who was mildly retarded and over-protective parents who were defined as those who tended to be most restrictive. Subjects were 129 mildly retarded adolescents, boys and girls, from rural and urban environments, taken from grades 9 to 11, and living in the Western States of the U.S.A.; and one parent of each of these children. Landman hypothesized that there would be differences in a total life skills measure among groups of children who would vary in the degree of protectiveness they received from their parents. This hypothesis was broken down further as follows:-

- 1) There would be a difference between the performance of over protected children and "non-over-protected" children on the total life-skills measure; and on measures of purchasing, job search and banking skills.
- 2) Least protected children would do less well or better than other children on total life skills, and on meaasures of purchasing, job search and banking.
- 3) Over-protective parents would disproportionately underestimate their children's performance on the total life-skills measure and on measures of purchasing, job search and banking.

The four areas to be measured were 1) the child's performance; 2) the child's knowledge (assumed to be a measure of his/her potential ability); 3) the parent's over-protectiveness; and 4) the parent's rating of the child's behaviour.

An Applied Performance Test was used, combining tasks which tried to simulate real life as closely as possible. The Test was

constructed so that the subject experienced success in the task which could also be considered as a learning experience, i.e. after each test the correct answers were given. The purchasing test included 23 items including counting money, computing discount prices, reading and understanding a warranty. There were 28 job search items, ranging from knowledge of the difference between employer and employee, to knowledge of questions to ask a potential employer. Twenty-eight banking items covered endorsing a cheque to understanding the consequences of defaulting on repayments on a loan. This set of tests took about an hour to be administered to each subject, and subjects were tested individually.

The children's knowledge of these areas (as opposed to their performance) was measured using three relevant sub-tests of the Social and Prevocational Information Battery (SPIB) (Halpern, Raffield, Irvin and Link, 1973).

To obtain the rating of children's behaviour, parents were given a 70-item questionnaire on whether their adolescent son or daughter could perform tasks in job search, banking and purchasing. In order to measure parents' over- or under-protectiveness, they were asked at what age they would allow or encourage the child to attempt 30 of the tasks. Results from these scores were computed on a regression model to predict the average age at which each child should be allowed to attempt tasks, based on the child's chronological age and his Knowledge Test score. The average age stated by each parent was computed and the two figures compared. Children were then classified as over, average or least protected in each area and for total life-skills.

A comparison between the parent's rating on 29 items and the adolescent's performance was made.

Analysis of co-variance was used to look for the possibility of significant differences among groups of children differing in degrees of protectiveness on the A.P.T. Only a small negative correlation was found between protectiveness and total life skills.

Turning to the three skill areas the results can be summarised as follows: 1) Purchasing skills appeared to be well understood by

over-and non over-protected children. Age did not appear to be a significant variable and all groups found the skills quite hard. 2) There was no significant difference between groups for job search skills; and all groups found them relatively difficult, which suggests floor effects. 3) In banking skills, the least protected children scored higher than the other groups ( $P < 0.01$ ); although this area was the most difficult for all groups.

Discussing these results, Landman suggested that it appeared that extreme protectiveness impaired the mildly retarded adolescent's ability in total life-skills. The fact that on the whole the least protected children scored significantly higher than other children may be explained because their parents were well able to judge what their children could do. 'Protection' for them was unnecessary.

With the over-protected children, it appeared that their knowledge (interpreted as potential ability) was higher than their performance. Taken together with the fact that parents underestimated their performance in extreme cases, it appeared that the children functioned "down to the level" of their parents' expectations. As Landman admitted, however, the causation implied by this was only inferential and goes beyond the findings of this study.

The order in which skill areas appeared to be progressively more difficult seems logical. Children would naturally have greater experience of purchasing than either job search or banking, especially when they were younger. The over-protected children tended to do as well as non over-protected children on tasks they had experienced, or had been taught. However, they appeared to have learnt the tasks when they were older than the least protected children. Even so, this suggests that they may be able to catch up, and over-protection may not, therefore, be detrimental in the long term. It was only on tasks being learnt currently that over-protected children showed evidence of lagging behind because of restrictive parents.

In the same manner, early exposure to new experiences and encouragement of children to attempt new skills at an early age (as shown by the least protected children in the study), did not appear to

cause anxiety or impaired performance. As already discussed in the case of banking, the least protected adolescents scored highest. Landman suggested that least protection need not mean under- or inadequate protection, nor that these children are pressurised to achieve beyond their capabilities.

The study considered only very specific areas of skill. There may be a link between emotional dependence on parents or care-givers and impaired social growth, relationships, and lack of self-confidence, and restrictive parents. It is also important to remember that only restrictive over-protective parents were singled out in this study. The alternative, the over-indulgent protective parent, might not underestimate the child's skills and affect his performance in these areas. Seeing the child as a dominating force within their own lives, they might overestimate performance and capability.

Within the limited area of research, it would seem that the study indicates that over-protective, restrictive parents may cause retarded children to function at a level below their potential. Despite parental fears that exposing their children to wider experiences may pose hazards for the children, the least protected children in Landman's study appear to have benefitted from these experiences.

To an extent, the level of protection or independence may vary depending on whether children are functioning in or out of the home environment. For instance, Jeffree and Cheseldine (1981) in their survey of ESN (S) teenagers report that mothers encouraged reasonably independent behaviour of the handicapped children within the home environment. For example, over 50% helped with household chores and 46% made their own beds. In addition, 77% made a cold dinner and 51% made a hot drink, but only 3% prepared their own simple meal.

Independent activities outside the home were considerably curtailed. Although some ESN (S) teenagers were thought capable of going round to the local shop, shopping was generally done with the family, and few travelled away from home alone. Only 2% travelled alone on public transport. Handling money was also a

problem, and many were not given pocket money of their own, unless it was handed over for a specific purpose. As Jeffree and Cheseldine point out, some of these skills may be taught at school but, unless parents allow opportunities to arise when these skills can be practised and maintained, the skills may be lost. On the other hand parents may be acutely aware of failures in the past and wish to reduce further failure or risks in the future.

These results accord only in part with the findings of an Australian study looking at competencies in mildly handicapped adolescents. Smith and Sykes (1981) indicated that when parents assess the social competencies of their mildly handicapped adolescents (N=43) a number of points arise. Firstly while parents did not use the terms 'mentally retarded' or 'mentally handicapped', they acknowledged their children were 'different', and mentioned speech difficulties or sensory-motor deficits.

Asked to compare their children with children of the same age, parents considered their children had deficiencies in handling money and change. Only a third could shop independently, but up to 70 % travelled alone on public transport. 54 % often helped around the house and 72 % cooked a simple meal at least sometimes. Smith and Sykes indicated that those who rarely shopped or went out alone had parents who preferred to take them out in the car, thus curtailing their children's opportunity to learn and practice independence skills. They comment:

"Even parents who expressed amazement at achievements reported from the centre, still continued to carry out many of the tasks newly mastered by their sons and daughters."

In addition 47 % spent most of their free time with their families which compared to 6 % of normal children who did so. Parents predicted that only 59 % would be living independently in the future (10-15 years) and a quarter were seen as still living with their parents. Thus unlike Wolfensberger and Kurtz's (1971) study, parents were not particularly optimistic about the future.

### 2.3.5 Parental Behaviour and Children's Competence

The link in the chain between parental expectancy and the child's behaviour was based on the assumption that parents of handicapped children will translate their expectations and attitudes into actions towards their child which will affect the child's behaviour (Organist, 1971).

Hunt (1980, 1982) studied the interaction between independent and dependent mildly retarded adolescents and their mothers while completing a problem-solving task under laboratory conditions. She assumed that incapacity in independence skills is likely to be caused by a combination of a real incapacity within the child and the family background and upbringing of the child.

In all, 24 borderline and mildly retarded adolescents were chosen from 49 families who had agreed to take part in the study. The age of the adolescents ranged from 16-21 years and all lived with their families in urban and rural areas in West Oregon, U.S.A. Two groups of adolescents, (12 dependent, and 12 independent) were identified on a number of varying measures.

Subjects were included only in the most rigorously defined group (3 dependent and 3 independent) when there was 100 per cent agreement on all measures. The second group (moderately rigorously defined) was assessed on all measures but needed agreement on only four out of the five. This identified 14 subjects (7 dependent and 7 independent). The least rigorously defined group (12 dependent and 12 independent) were judged solely on a dependence questionnaire. However, on being given a social and prevocational information Battery, (administered orally to all adolescents), it was found that the ability of the adolescents in the final dependent and independent groups was very similar.

Once identified, the 24 mother-adolescent pairs were asked to plan together an activity of their own choosing. The room had been furnished to represent a miniature living-room. Various suggestions with regard to how the outing might be planned (e.g. when, where etc.) were written on a pad and left in view on a table in the experimental room. The whole task, which took 20 minutes, was video-taped through a one-way mirror.

The tape was scored in 30-second blocks of activity for 28 different categories of behaviour which were grouped under five behaviour/clinical levels as follows: 1) Problem solving; 2) Positive verbal behaviour; 3) Positive non-verbal behaviour; 4) Negative verbal behaviour; and 5) Negative non-verbal behaviour. The tapes were analysed by two independent, trained coders with a minimum of 70 per cent intercoder reliability.

The first research question was to consider whether there was a set of identified behaviour variables which differentiated between independent and dependent adolescents in a problem solving task. Hunt concluded that data from all three pairs of groups (most rigorously, moderately and least rigorously defined) reflected the same prevailing trends, although this was particularly so in the most rigorously defined group. Hunt interpreted these results as indicating that independent adolescents were shown to do more problem solving and were more verbal than dependent adolescents. Dependent adolescents, on the contrary, did less problem solving and were more nonverbal, particularly negatively non-verbal.

The second research question was to consider whether there was a set of identified behaviour variables which differentiated between mothers of independent and mothers of dependent mildly retarded adolescents. From these results Hunt concluded that prevailing trends are again reflected in all three groups, but particularly so in the most rigorously defined group. Mothers of independent adolescents did less problem-solving than those of dependent adolescents and tended to show more positive non-verbal behaviour.

The final research question considered whether there was a set of identified behaviour variables which differentiated between the mother-adolescent interaction patterns in independent and dependent mildly retarded adolescents. Here again the prevailing trends were reflected in all three groups. Overall, independent adolescents did as much problem solving as their mothers, and were more verbal than their mothers. Dependent adolescents did less problems solving and spoke less than their mothers.

The overall interpretation made by Hunt was that mothers of dependent adolescents 'take over' when they problem solve with their



adolescent children. This left the adolescent in the less assertive role. In the dependent role, the adolescent might express his discontent in a negative non-verbal way. Viewing this from a systems theory point of view, Hunt proposed that the transactional patterns between mother and adolescent might be repeated, and then gradually become accepted as the 'way of being' for the individuals involved. In other words, parents might accept the child's dependent behaviour as the only way he could behave rather than seeing it at least in part as a product of his upbringing and their own behaviour towards him.

The findings and interpretation of this study are of interest, although perhaps not particularly surprising. However the study has a number of limitations. The most important is that the numbers in the groups are relatively low. In the least rigorously defined groups, with 12 subjects in each group, the 'prevailing trends' are not all always very apparent. The percentage for a specific behaviour out of the total behaviour observed is considerably reduced as the groups become less rigorously defined. Thus with regard to problem solving, the percentage of adolescent behaviour dropped from a difference of 9 percent for the most rigorously defined group to 0 per cent for the least rigorously defined group. Figures taken from comparisons of the two groups of 3 subjects each, cannot be analysed statistically and must be highly questionable when interpreted as an indication of even a trend. Only for research question 3, (Mother-Adolescent Interaction Patterns), are the differences more constant for all three groups, although the differences in the largest (least rigorously defined) group are again small.

Secondly, as Hunt herself points out, the dependency questionnaire was originally designed to be used on a younger, urban population. Its use as a means of identifying dependent and independent groups of 16 to 21 year-old adolescents from a more rural background may invalidate it, and it may at best be considered questionable as a sole means of identifying a group, as it is here. This questions the validity of the two least defined groups.

It would be extremely dubious, therefore, to take this study as more than an indication of possible interaction patterns between

mothers and their independent and dependent mildly retarded adolescents if it stood alone. The study's value is that it rightly looks at the actual interaction, (albeit limited to a laboratory situation), between mothers and adolescents, and points in a tentative way towards an understanding of how mothers might reinforce interactive patterns of behaviour with their children in such a way as to create and/or maintain dependency. At the same time, it could be argued that mothers of dependent adolescents knew from past experience that, left to their own devices, their dependent children were unable to problem solve unless they were given a lead by someone else.

Herman and Shantz (1983) observed mothers of 12 handicapped (Mean IQ = 59) and 19 non-handicapped children with their own child in a semi-naturalistic situation, where teaching, co-operation and free play were required. In addition the children's social problem-solving abilities were assessed using the Vineland Scale. Herman and Shantz suggested that a review of research with a younger population of handicapped children showed that mothers place both greater limits on children's contact with people and activities outside the home. In addition they concluded that mothers were found to be more directive in their interactions with retarded children than were mothers of non-handicapped children.

Their own research supports Hunt's work. For the handicapped group, there was a negative correlation between maternal directiveness and the number of solutions in a problem solving task that children produced ( $R = -.66$ ;  $P < 0.01$ ). There was also a significant negative correlation between maternal playing interactively and encouragement of problem-solving ( $R = .49$ ;  $P < 0.05$ ). For the non-handicapped group there were no such relationships.

In addition, mothers of handicapped children were found to be more directive than those of non-handicapped children, and the non-handicapped group of children produced more alternative solutions to the problem-solving task ( $t = 4.50$ ; 29 d.f.;  $P < 0.01$ ).

These findings indicate that the different levels of control may have different developmental consequences for handicapped as opposed to non-handicapped children. At the same time the signi-

ficant difference between maternal behaviour in the 3 situations highlights the importance of sampling behaviour in different situations, as mothers' sensitivity to task specific variables appears to affect their interactions with their children.

### 2.3.6 SUMMARY

One major impression from the studies reviewed is that parents differ in how they perceive their children's present and future abilities. Looking at a group of parents of children with varying degrees of mental handicap Condell (1966) found that parents expressed more reservations about the future than any other area. Interestingly, parents criticised others, but not themselves, for isolating and overprotecting handicapped children, although they expressed some concern about their own child's social behaviour which they hoped would be overlooked by neighbours when it was inappropriate. Wishart et al (1980), however, found that parents in South Wales tended to be hopeful for the child's future development, and expressed increasingly favourable attitudes towards the child from past to present. Nonetheless, when the degree of handicap was considered, parents of the most handicapped were less positive generally. This last point is important. In the studies reviewed, authors are not always clear about the severity of mental handicap of the children they studied. For instance, mothers whose self-concept varied across situations were likely to be less accurate in assessing their handicapped children, although, as a group, they were not more or less accurate than mothers of non-handicapped children (Aserinsky, 1981). McEvoy and McConkey found that children (degree of handicap unspecified) had limited experience of playing with other children which suggested that social (dangerous neighbourhood) and parental protectiveness affects children's opportunities.

Elsewhere studies have looked at both the more severely and less severely handicapped. Wolfensberger and Kurtz (1971) found that parents were fairly accurate in estimating their children's abilities. Parents' future predictions, however, were judged over-optimistic. The exception to this was the area of self help skills and occupation, which parents marginally, although not significantly, under-estimated for the present, and saw in relatively less optimistic terms than other skills in the future.

However, in considering various factors which may affect parental realism, Wolfensberger and Kurtz found that middle class, Protestant parents and particularly parents of less handicapped children were more accurate than other parents in their estimation of their child's skills. A study in Israel by Weller et al (1974) found parents of the severely handicapped children were more accurate than those of less handicapped children in judging their children's abilities. In addition, guilt and acceptance were not related to level of handicap or class and country of origin.

Pedulla's (1975) study supports Wolfensberger and Kurtz' findings with regard to the importance of factors related to class and degree of handicap, i.e. mothers of the less handicapped were better at predicting their children's scores. However, Pedulla also suggests that a factor of maternal emotional adjustment may be important with regard to mother's realism, and in part accounts for the variation in mothers' scores.

Looking at studies where parents of only mildly handicapped children have been considered, results also conflict. In an attempt to link parental expectations, attitudes and patterns of behaviour towards mildly handicapped children, Organist (1971) found parents were least optimistic and underestimated personal-social responsibility - mothers significantly so. However, he failed to find links between expectations, patterns of parental behaviour towards children, and children's behaviour. When one considers these results in relation to the tentative links found in the teacher expectancy studies, Organist's failure to find a relation between expectations and interactions between parents and their children is interesting. It is possible that his behaviour measures are inappropriate. Certainly children and their parents were not directly observed. This might have indicated subtle cues in parents' behaviour of which children were aware and to which they reacted. However, Organist may be correct in concluding that inaccurate (or over-optimistic) parental expectations are not necessarily detrimental to the development of handicapped children.

In fact the study by Landman (1978) suggests optimism over a child's ability may encourage independence, if one can assume that

over-estimating present and future abilities reduces the degree of parental protection.

Landman found very restrictive parents tended to underestimate their mildly handicapped child's skills and, where this occurred, the children performed at a level below their assumed potential. The least protected children in the study, who had wider experience, performed better than the other children. Smith and Sykes (1981) report similar abilities in skills displayed by mildly handicapped and non-handicapped adolescents in the home, but greater skills and opportunities outside the home for normal compared to handicapped adolescents in Australia. Parents were also not optimistic about the future for the handicapped children. These results were also found when parents of the more severely handicapped are studied, i.e. the degree of social and independence skills acquired may vary depending on whether they are home-based or outside the house (Jeffree and Cheseldine (1981).

Further, there is some evidence to suggest that mothers may communicate their expectations to the mildly handicapped adolescents by reinforcing different types of behaviours (Hunt, 1980, 1982), although evidence from this study needs to be considered cautiously. Hunt concluded that mothers of dependent handicapped adolescents took over in problem-solving situation which led the adolescent to withdraw to the less assertive role. With mothers maintaining these patterns of behaviour, they encourage dependence. This is then perceived as the only way the adolescent can behave. Herman and Shantz (1983) also found mothers of mildly handicapped children were more directive in their interactions than mothers of non-handicapped children, and that there was a significant relationship between maternal directiveness and lack of problem-solving skills in handicapped but not non-handicapped children.

Overall, evidence is mixed as to the accuracy of parental perceptions of mildly handicapped children, although in terms of the child's social and independence skills there is a tendency for parents, and particularly mothers, to under-estimate the child's potential.

As has already been seen, parents are not the only adult influences in the child's life. Evidence pooled from parents' and teachers' perceptions of interactions with handicapped children shows that there is at least the potential for expectations to be detrimental if these are lowered, or positive if expectations are raised. A great number of factors will influence both parents' and teachers' perceptions, which means there is considerable variation within both groups. However, it is pertinent to ask whether there is a consistent trend in the different ways teachers and parents perceive handicapped children. The next section considers the evidence.

## 2.4. PARENTS' AND TEACHERS' PERCEPTIONS

### 2.4.1 Introduction

One of the many findings in the Isle of Wight study was in connection with the selection of children who might have psychiatric disorders (Rutter, Tizard and Whitmore, 1970). Although both parents and teachers selected about the same proportion of children whose behaviour suggested they might have psychiatric problems (6% and 7.1% respectively), when examined more closely there was found to be little overlap between the two groups of children selected. As well as considering the possible inadequacy of the screening instruments used, the authors suggest that both situation-specificity of children's behaviour and variations between perceptions of parents and teachers may have accounted for this general lack of agreement.

These two points, situation-specificity and different perceptions of the same handicapped children will be considered in this section which looks at comparisons between parents' and teachers' perceptions and children's behaviour at home and at school.

### 2.4.2 Parents' and Teachers' Assessment of Children's Behaviour

A number of writers have reported that parents and teachers of handicapped children do not agree in their assessments of certain child behaviours.

Mealor and Richmond (1980) have found disagreement between parents and teachers when looking at the child's level of adaptive beha-

viour. This area is a sensitive one in as much as maladaptive behaviour is one of the criteria in defining mental retardation. Mealor and Richmond point out that nearly all the most popular instruments which have been used to measure adaptive/maladaptive behaviour rely on an informed source to provide the data and that such sources are liable to bias the results.

To illustrate this they asked parents and teachers of 60 severely handicapped children (IQs of 25 to 50), and between the ages of 7 to 13 years, to complete the Cain-Levine Social Competency Scale; and the AAMD Adaptive Behaviour Scale (Pt.1).

Neither race of the teacher nor the race of the parent significantly influenced the ratings of children. There was, however, a difference between parents and teachers. While teachers did not exceed parents in their estimations on any of the subscales in either of the two tests, parents exceeded teachers on the self-help subscale in the Cain-Levine Scales ( $P < 0.001$ ); and on independent functioning ( $P < 0.001$ ); physical development ( $P < 0.05$ ), economic activity ( $P < 0.05$ ), domestic activity ( $P < 0.05$ ), and vocational activity ( $P < 0.001$ ) in the Adaptive Behaviour Scales.

The findings may indicate that those areas where parents were more optimistic were areas where parents have more knowledge of the child's actual behaviour than teachers. It may also illustrate a more positive attitude of parents compared with teachers which is reflected in their perceptions of the child's development. Looking at a more able group of children, Blazovic (1972) has also found that parents were more likely to accept academic limitations in their EMR children but did not perceive them as socially different from other students. This, however, was not the case with teachers who rated handicapped pupils' behaviours in class as different from that of normal pupils.

In this country, Jeffree, Cheseldine and Shorvon's comparison of mothers' and teachers' rating of 12 ESN (S) children between 12 and 14 years, using the Pathways to Independence Checklists did not find any significant bias in ratings in either direction (1981). However, although mothers and teachers agreed on 31.3% of the questions, for 36.4% of the questions, mothers rated their

children as more able than did teachers, and for 32.3% of the questions teachers rated the children as more able than did the mothers. Thus despite there being no overall significant difference between ratings of parents and teachers, it is still notable that there was agreement on only just under a third of the questions.

Reviewing the American literature, Prout, Harper, Snider and Lindgren (1978) also conclude that there is evidence of generally high expectations by parents as compared with teachers. To examine this discrepancy parents, (35 mothers and 16 fathers), and teachers, (8), of 35 TMR children were asked to complete a modified form of the Alpern and Boll Developmental Profile (1972), which produced an IQ equivalent (IQE). The IQs of all children were assessed using the Stanford Binet.

The results indicated that the scores of mothers and fathers correlated on all the subscales between .81 and .94, all with a significance of  $P < 0.001$ . Similar correlations between mothers and teacher estimates correlated ( $r = .63$  to  $.81$ ), all of which were significant at  $P < 0.001$ . However, mothers' scores differed significantly from teachers' scores on self-help, physical, and communication skills with mothers giving higher ratings. The last result may seem hardly surprising as mothers might naturally be expected to have a better understanding of their children's communication than anyone else. The self-help result concurs with the findings of Mealor and Richmond (1980). Prout et al point out that reported differences may reflect the child's real differing behaviour in two different settings; or that parents' higher expectations and hopes distort their perceptions, along with their inexperience in assessing developmental levels in children.

Correlations between the Stanford-Binet IQ and the IQE were .51 and .63 for mothers and teachers respectively, with no significant difference between the ratings. Parents of older children tended to be more accurate, perhaps because they had more experience of their children.

Prout's reflection that neither parents nor teachers may be wrong in their perception of a child's behaviour, although they



may differ, highlights an awareness that children may behave differently in different situations. This is re-iterated by Carter (1983) who found parents of black EMR children were consistently more positive in their ratings of their children than were teachers. Prout et al suggest that it should be possible to assess the child's behaviour and identify the sources for these differing perceptions, so that misunderstandings between parents and teachers are reduced.

However, there is some contrary evidence that parents significantly rate Down's Syndrome children as less socially skilled than do teachers (Middleton, 1980). This also concurs with the findings of Savage (1977) who has compared perceptions of mothers, fathers and teachers of severe to moderately handicapped adolescents (between 14 and 18 years: IQ = 35 to 60). All parents came from the middle socio-economic class; and teachers all had a mean of 3.2 years in special education. The three sets of subjects were given two tests, a) a Continuum of Independence which elicited perceived levels of adjustment in home-living, work, recreation, personal relationships and social situations; and b) an Attribute Card Sort. Subjects were asked to complete the Continuum of Independence for the present time and as projected when the child would be 25 years old.

The Attribute Card Sort was based on conceptualising the family as a social system of complementary roles. This proposed that the nuclear family could be judged on two axes: a) a hierarchy of power; and b) instrumental vs. expressive function. Thus the father might traditionally be seen as high on power and instrumentality (i.e. concerned with external affairs of the family and the situational relationship of the family), while the mother might fulfill a role equally high on power, but high on expressiveness (i.e. concerned with the internal affairs and maintenance of the relationships within the family). Assumptions that parents always play these respective roles is perhaps open to question nowadays.

Savage used 15 cards in the Card Sort, 5 of them giving emotionally-orientated attributes, 5 giving low technical attribu-

tes, and 5 giving high-technical attributes. Subjects were asked to choose 5 of these cards to describe the child as he was at present and 5 to describe him in the future. It was hoped that this procedure would elicit "the perceptions of attributes deemed important for the present and projected functioning" of the handicapped child.

Analysis indicated that raters perceived the projected level of independence at 25 to be higher than the present level ( $P < 0.001$ ). Mothers and fathers perceived the level of independence similarly, while the teachers perceived a higher level of independence at the age of 25 ( $P < 0.05$ ). However, half of the fathers, a quarter of the mothers, and a quarter of the teachers, perceived no significant differences between the present and the projected level of independence. Parents chose less emotionally-orientated attributes (e.g. being happy and feeling good about self) than the teachers. Significantly more low level attributes (e.g. communicating with others and crossing roads) were chosen by raters for the present, with mothers selecting more low-level attributes than teachers. However, there was a greater number of high-level attributes (e.g. performing adequately in a job and using an appropriate transport system) chosen by raters for the projected needs of the moderately retarded young adults. In other words, parents and teachers anticipated that by the time the children were adults of 25, they would have made considerable gains from low level to high level attributes. The children's sex did not affect the projected levels of independence, nor the attributes which were deemed important.

The study has a number of limitations. Initially, the sample of parents was restricted and Savage admits that socio-economic class of parents may affect results. At the same time, findings can only be confined to the moderately retarded, although tentative generalisations might be made.

In particular, the Attribute Card Sort should be questioned. First of all, it restricted parents to allotting any card to either the present or projected rating, i.e. a card, once chosen to describe the child at present, within the design of the test,

could not be used to describe him at 25 even if raters saw no change from his present to projected behaviour. Secondly, the attributes were limited to specific situations. For instance, with regard "Able to cross streets safely", parents living in the country might choose that attribute while parents living in the city might be more reluctant to do so. Savage admits to both these limitations, but feels the results from this measure are still valid. However, it might seem better to disregard the Attribute Card Sort as having only very limited use.

Another limitation, which Savage herself points out, is that each teacher had to rate 4 children (i.e. there were only eight teachers in all). Generalisation from such a small sample should be guarded. In addition, with their specialised knowledge of handicap for special children, teachers might have judged each child vis-a-vis other handicapped children, while parents may make the judgment vis-a-vis normal children. This is, however, a methodological problem which affects many studies of parent/teacher comparisons.

The primary finding, that projected levels of independence were higher than present ones, is perhaps not surprising. Even so, 8 of the mothers and 2 of the teachers foresaw no improvement at all in the future. It is unlikely that similarly pessimistic views would be expressed by the same proportion of teachers and mothers with regard to normal children of the same age.

Savage considered that the more hopeful outlook of teachers with regard to the projected scores might be because teachers would have greater faith in their ability to train the moderately retarded in technical skills. She also suggests parents might not have been up to date with the trend in education programmes towards independence for the moderately retarded. This is certainly possible but should not be assumed. Parents' intimate knowledge of the child may give them a more accurate picture of their child's potential although, at the same time, they may also have fears for the future which are unfounded.

This last finding accords with Koster (1978) who has found that, while teachers generally become more optimistic, parents' attitu-

des in terms of career education for their children become less optimistic as their children get older, perhaps because parents are increasingly aware of the disparity between their child's attainments and work opportunities as children approach adulthood.

Overall, the results of Savage's study suggest that close attention should be given to the necessity for parent-teacher interaction in the education of moderately retarded children, a trend already discussed in the Introduction and elsewhere in the Literature Review. There appear to be differences in the type and level of attributes deemed important and in the degree of independence that children may attain by their mid-twenties as perceived by parents and teachers. Even so, some dependence on others to attain satisfactory vocational, recreational and social adjustment to adult life was deemed necessary to achieve relative independence at 25 years.

There is also evidence that parents and teachers do not always differ (Wilgosh and Barry, 1984). Twenty-two TMH (IQ = 36-54) adolescents (mean age 16.2 years) were rated by parents and teachers on the AAMD ABC and the ratings were not significantly different. The same authors also found that parent and teacher perceptions of students' job prospects were also in agreement (Wilgosh and Barry, 1983), although both groups were generally undecided about the occupational interests of the adolescents.

Nonetheless, when perceptions differ it is possible that this can lead to difficulties in adult training of independence and daily-living skills. Bartnik and Winkler (1981) looked at mild to borderline young adults (18 years plus) and found that parents and staff in a community residential service or in independence training hostels differed in the importance they gave to training personal responsibility. Parents were more concerned with social activities, personal hygiene and budgetting for their 'children'. Service agency staff gave greater priority to teaching personal responsibility. This finding underlines the continuing need for parents to be involved at all levels in the process of social and independence training. Where perceptions of goals and objectives are generally consistent, there is a good basis for planning

programmes (French and Wilgosh, 1984). They found that parents, teachers and employers agree on the goals of career education.

#### 2.4.3 Parents' and Teachers' Assessments and Children's Performance

Rosenberg (1979) has looked at the predictions of performance by teachers as well as parents, and compared these predictions with the actual performance of moderately handicapped students on certain tasks from the AAMD ABS. In his review of the literature, Rosenberg argues that in the past the moderately retarded functioned at a level below that at which they were capable, due in part to society's expectations. In principal, he agrees with the disputed findings of Rosenthal and Jacobson (1968) that, over a prolonged period, a child's performance will be affected by what is expected of him and he will eventually conform to his expected levels of behaviour. Rosenberg comments that handicapped children tend to have less positive interchange with their mothers than non-handicapped children and are likely to live in more restrictive and controlled environments. Rosenberg concludes:-

"Lower expectancy for performance may serve to extinguish opportunities available for retarded children to achieve competencies, whereas high expectancy towards these children may increase opportunities available for them to demonstrate and display their ability." (P.15)

Initially, 32 teachers from a Californian school for the mentally retarded were given a questionnaire to assess their levels of expectancy towards moderately handicapped adolescents. The eight with the highest expectancy scores, and the eight with the lowest scores were selected. The selected teachers were then asked to rank order 5 children in their class in terms of the children's general ability. The children with the highest and lowest scores in each class were chosen as subjects. The resulting 32 moderately handicapped adolescents were all male, had a mean chronological age of 14.8 years, and an IQ ranging from 38 to 47.

Teachers and parents of the children were given a questionnaire including 13 tasks from the A.A.M.D. Adaptive Behaviour Scales in areas covering: 1) Personal self-sufficiency; 2) Community self-sufficiency; and 3) Personal-social responsibility, and asked to

predict how well the children would perform when tested. Once all the completed questionnaires were collected, children were then evaluated by two trained graduate students in special education. The subjects were tested in natural settings and given one opportunity to perform each task.

The tasks included ordering food in a restaurant, washing hands, delivering a message, purchasing, setting a table, occupying oneself for half an hour of leisure time, and finding lost clothing. Scores of the students' performance analysed within the expectancy groups can be seen in Table 2.3 below.

TABLE 2.3

CHRONOLOGICAL AGE IN MONTHS AND IQs OF STUDENTS IN EACH OF THE  
EXPERIMENTAL CONDITIONS

CONDITION	C.A.	S.D.	IQ	S.D.
High teacher expectancy High pupil ability	196.25	14.86	40.50	5.91
High teacher expectancy Low pupil ability	203.50	14.69	37.25	11.09
Low teacher expectancy High pupil ability	191.50	13.07	39.25	6.16
Low teacher expectancy Low pupil ability	202.00	17.57	36.88	8.36
AVERAGE TOTAL	198.31	15.05	38.47	7.88

Taken from: "Teacher and Parent Predictions of Performance vs. Actual Performance of Moderately Retarded Students on Specific tasks." Rosenberg, P.,D. (1979) Unpublished PhD. Thesis. University of California and California State University, Los Angeles.

Rosenberg hypothesised that students with high expectancy teachers would perform better than those with low expectancy teachers.

When teachers' predictions were compared with actual student performance in a 3-way ANOVA (2 levels of teacher expectancy; 2 levels of student ability; and 2 levels of performance), no significant interaction between expectancy, ability and performance was found. However, the following main effects were clearly indicated (significance level of  $P < 0.01$ ):-

- 1) Students of high expectancy teachers had higher performance scores than students whose teachers had low expectancy scores.
- 2) Students whom teachers had predicted had higher ability, had higher performance scores.
- 3) Mean performance of students (irrespective of their ability or their teachers' expectancy) was higher than teacher predictions.

Comparing parents' predictions with student performance, the most significant finding was that handicapped children's actual perfor-

mance was higher than their parents' predictions ( $P < 0.01$ ). A comparison of parent and teacher predictions on 2-way ANOVA revealed that:-

- 1) Higher ability students were predicted to perform better than lower ability students ( $P < 0.01$ ).
- 2) Parents' predictions were lower than teachers' ( $P < 0.01$ ).

Finally, analysis of the tasks showed that parents and teachers agreed on the ranking of tasks according to difficulty of task, and this accorded with students' actual performance ( $P < 0.01$ ).

These results appear to support the main hypothesis that students with high expectancy teachers will perform better than those who have low expectancy teachers, irrespective of whether they are of low or high ability. In fact, there was very little difference between students seen as having high or low ability. This might suggest that, if the two ability groups had been more different, expectancy of teachers might not have had such a marked effect. By implication, students with low expectancy teachers might be thought to perform down to the level of their teacher's expectancies, but this does not appear to be the case in this study.

It is interesting to find that moderately handicapped adolescents performed better than both teachers and parents predicted, particularly as parents in this study predicted significantly lower than teachers. The tasks were such that the parents might be considered to have greater knowledge of their child's ability than teachers, i.e. laying a table, making coffee, occupying leisure time, all of which might be thought of as home activities. It implies that for this particular group of children, parents may tend to be overprotective, either restricting their children's opportunities as seeing them unable to perform tasks, by not asking them to contribute to some of the household tasks, or perhaps by resistance of adolescents to do things at home?

#### 2.4.4 Behaviour of Children at Home and at School

It has already been suggested that situation-specific influences on the social behaviour of handicapped children may cause the differences in perceptions by teachers and parents. In other words, the child's behaviour at home may differ from his behaviour at



school as a function of the environment created by parents and teachers respectively, or as a function of the child's own expectations. It is this that Berson (1975) has begun to consider.

Fifty-six girls and 115 boys classified as EMR from 20 classes were asked to complete the Piers-Harris Children's Self-Concept scale. The children were aged between 12 and 19. The standardised Piers-Harris scale produces six cluster items termed as 1) Behaviour; 2) Intellectual and School Status; 3) Physical Appearance and Attributes; 4) Anxiety; 5) Popularity; and 6) Happiness and Satisfaction. At the same time, teachers were asked to complete the Pittsburg Adjustment Survey Scale (Ross, Lacey and Parton, 1965). This test produces scores on social behaviour on a 3-point rating on: 1) Aggression, 2) Withdrawal; 3) Pro-Social Behaviour; and 4) Passive-Aggressive Behaviour. Finally, a week after completing the Piers-Harris scale, children were asked to complete a modified version of the Children's Reports of Parental Behaviour Inventory (Schaefer, 1965), which yields 8 factors: 1) Autonomy (extreme autonomy and lax discipline); 2) Autonomy and Love (moderate autonomy); 3) Love (positive evaluation); 4) Love and Control (possessiveness, overprotectiveness and intellectual stimulation); 5) Control (control through guilt, suppression of aggression); 6) Control and Hostility (strictness, nagging and punishment); 7) Hostility; and 8) Hostility and Autonomy (neglect and ignoring).

Results indicated that there was a significant relationship between teachers' perception of aggressive behaviour, sex of the child, child's self-perceived behaviour, anxiety, and child's perception of parental control. Firstly, teachers perceived male handicapped children as more aggressive than female. Secondly, there was a significant relationship between children's withdrawal behaviour (as perceived by the teachers), children's self-perceived anxiety and popularity, and children's perception of parental autonomy. Thirdly, there was a significant relationship between children's pro-social behaviour (as perceived by the teacher), their self-perceived behaviour and intellectual and school status, and their perception of parental control.

Berson suggests that where maladaptive behaviour is seen as being due to the adolescent's family situation rather than due to his handicap, intervention is possible. Looking at the results in this light, she considers a number of points. High scores for teacher-perceived pro-social behaviour of the EMR adolescent were related to high scores on the EMR's self-perceived behaviour, intellectual and school status. Berson considers that this might indicate how important it is to the child to be viewed as academically successful by his teacher, as this can relate to his pro-social behaviour.

This link between good self-image and being viewed as successful academically suggests the importance to the child's self-image, of being given tasks at which he/she can succeed. Berson points out that the educative goals are the same for both ESN and normal children (i.e. full realization of their potential), but suggests that perhaps greater emphasis should be placed on social and emotional rather than academic developmental goals for the EMR. However, if academic achievement appears to be correlated to a good self-perceived image, then goals in academic and social development should be considered important.

The interaction of self-perceived popularity and parental control also correlated highly with pro-social behaviour as perceived by the teachers. From this Berson concluded:-

"The older the child gets, and the more autonomy he feels, the more likely the pro-social behaviour will continue. The implication is that the educable moderately retarded child needs a greater degree of parental control, and for longer periods of time than his normal peers". (P. 58)

As Berson points out (P.65) it may be important to consider the Locus of Control for the EMR and whether this is different for the normal adolescent. It is normal that during adolescence children begin to break away from parental influence, and take the locus of control for their behaviour into their own hands. If, as Berson suggests, the EMR population externalize the locus of control - i.e. tend to feel less anxious when their behaviour is perceived to be directed by others, (e.g. parents and teachers), - then the parents' and teachers' behaviour is likely to affect the child's

feelings of security and his or her self-image as the above results would indicate. The results relating to the relationship of perceived parental autonomy and teacher-perceived withdrawn behaviour and the child's self-perceived anxiety and low popularity would concur with the above implication. As the older EMR children who received more autonomy from parents were less withdrawn, there seems to be some reason to accept the conclusion that parental control (or lack of it) related to the age of the EMR, may affect the child's behaviour and feelings.

Despite these interesting findings there are a number of qualifications which should be made about the study. Firstly the lack of a control group of normal children of the same age begs the question whether the above findings are indeed specific to the EMR adolescent or whether they would be replicated with normal adolescents. Secondly, ANOVA showed that there was wide variation amongst the 20 class teachers' perceptions of social behaviour in this study. This underlines the fact that teachers in special education should not be considered as a homogenous group. Decisions about the child's behaviour will depend on what Berson terms the "phenomenology" of the teacher, a point which has already been considered in the section on Teacher Perceptions. Observations of behaviour in the classroom might give more objective measures, and be particularly important if the child's educational classification is influenced by the teacher's perception, interpretation and tolerance of the child's behaviour.

Overall, however, Berson's study gives rise to several interesting points. 1) Perceived parental behaviour (with particular reference to control) is related to the social behaviour of their EMR adolescent children at school and thus the children's educational classification. 2) Teachers in special education are not a homogenous group, particularly with regard to their tolerance of maladaptive behaviour. 3) Certain social behaviours as judged by teachers seem to have a relationship with the child's perceived self-image.

With regard to TMR children, Nihira, Mink and Meyers (1981) have also looked at the relationship between home environment and school adjustment. Nihira et al write:

"..Because of the greater vulnerability of handicapped children, the impact of the home environment on their cognitive and social development may be more pronounced..."(P.8) than the influence on normal children.

In all Nihira et al looked at 104 TMR children (50 % male; 50 % female) with a mean IQ of 42.4 (SD 9.9); and their families. The ages of the children ranged from 9 to 16 years (Mean 12.5 years).

To assess the home environment a number of measures were recorded by experienced, trained observers. The variables and measures were : 1) Environmental-process variables; 2) Psychological climate and environmental pressures; 3) Child rearing attitudes and practices; 4) Demographic descriptions of the family ; and 5) Child School Adjustment - i) Children's self-concept and ii) School Behaviour.

Table 2.4 shows selected results of the correlation coefficients between home environment and school adjustment variables.

TABLE 2.4

CORRELATIONS BETWEEN HOME ENVIRONMENT AND  
SCHOOL ADJUSTMENT VARIABLES (N= 104)

HOME ENVIRONMENT	SCHOOL ADJUSTMENT	Correlation Coefficient
Provision of stimulation through equipment, toys, and experiences	Social status rating	.33 **
	Self-esteem	.24 *
	Academic concentration	.22 *
	Misbehaviour	-.38 **
	Anxious-depressive	-.28 **
	Social maladaptation	-.36 **
	Personal maladaptation	-.26 **
Stimulation of mature behaviour	Community self-sufficiency	.32 **
	Personal self-sufficiency	.29 **
	Personal-soc. responsibility	.26 **
	Academic concentration	.26 **
	Outgoing-expressive	.21 *
	Self-concept personal	.24 *
	Social status rating	.24 *
	Personal maladaptation	-.32 **
	Social maladaptation	-.28 **
Misbehaviour	-.28 **	
Avoidance of restriction and punishment	Social status rating	.26 **
Independence from parental control	Social participation	.25 *
	Outgoing-expressive	.24 *
	Community self-sufficiency	.21 *
	Personal maladaptation	-.25 *
Control	Social maladaptation	.22 *
	Misbehaviour	.21 *

\* P&lt;0.05

\*\* P&lt;0.01

From: Nihira, K., Mink, LT., & Meyers, C.E. (1981) Relationship between Home Environment and School Adjustment of TRM Children. American Journal of Mental Deficiency, 1981, 86,(1), p.12.

As will be seen, there appears to be a significant positive correlation between provision of stimulating experiences, encouragement of mature behaviour at home, independence of parental control, and avoidance of punishment and restriction, and the child's adjust-

ment in school. Thus, provision of stimulation at home positively correlated with the child's social status rating, his self-esteem and academic concentration, but was negatively correlated with anxiety-depressive, misbehaviour, and social and personal maladaptation. Children's personal maladaptation was also negatively correlated with the stimulation of mature behaviour at home, and children's independence of parental control, but positively correlated with the amount of control exercised by parents in the home. The stimulation of mature behaviour also significantly correlated with aspects of children's self-sufficiency and responsibility, suggesting that when TMR children are encouraged to exhibit maturity at home, they are also likely to show signs of maturity at school. Yet, although these correlations are all statistically significant, it is noteworthy that the correlations themselves are not large. Thus, although there would appear to be significant relationships between variables, the degree of overlap between home environment and school adjustment is not particularly great.

Even so the study suggests, as does Berson's, that when teachers assess retarded children home environmental factors are important variables affecting the child's behaviour at school, particularly with regard to maturity, adaptation, social participation and self-esteem.

To what extent are parents aware of the importance of home influences and attitudes on their children's behaviour at school? Vernberg and Medway (1981) have studied teacher and parent perceptions of what causes school problems by interviewing 30 mothers and 30 teachers of normal children who had recently been in disagreement over the children's problems at school. An analysis of the results revealed that parents believed that the problems children displayed at school were mainly the teachers' fault, and to a lesser extent due to the child's characteristics when he was not under their control. Similarly, teachers laid the main blame on parents and home influences, to a lesser extent on child characteristics, but not on themselves at all. However, teachers anticipated where parents would attribute the blame, but parents were unaware that teachers would consider them partly accountable for the child's behaviour at school.

#### 2.4.5 Summary

The Isle of Wight study (Rutter et al, 1970) had shown that although parents and teachers selected an equal proportion of children who might have problem behaviour etc., the children chosen by parents were rarely the same children as those chosen by teachers. This implied that when the same children were independently judged by their parents and teachers, they were perceived differently.

The same has been often, if not always, found to be true of mentally handicapped children and adolescents. Heath and Obrzut (1984), Meador and Richmond (1980), Blazovic (1972) and Prout et al (1978) all indicate that in terms of self-help and independence skills, mothers and/or fathers are likely to rate their children as more competent than do teachers of the same children. In terms of academic or IQ levels, however, parents are not found to be more optimistic than teachers. Blazovic suggests that they are more likely to accept their children's academic limitations, and this concurs with Prout et al's finding that parents' and teachers' estimates of children's IQ levels as measured on the Stanford-Binet correlated significantly. Thus parents would seem to agree with teachers about poor academic levels, but disagree, in terms of being optimistic over children's social competencies. Although Jeffree et al (1981) did not find any overall disagreement between mothers' and teachers' ratings of ESN (S) children's independence in terms of a total score, closer analysis of questions revealed that parents and teachers agreed on their ratings of the same children only one time in three.

Contrary to the above findings that parents were more optimistic about mentally handicapped children's social skills, Rosenberg's study (1979) which compared parents' and teacher's predictions with actual performance of moderately retarded adolescents in personal self-sufficiency and social responsibility tasks, found that parents tended to underestimate compared with teachers. Other work has found that teachers are more optimistic than mothers/parents (Savage, 1977; and Middleton, 1980); or that there are no significant differences at all in terms of adaptive behaviour (Wilgosh and Barry, 1983a) and job prospects (Wilgosh and

Barry, 1983b). This disparity in findings is possibly related to the different age range of the children in studies. It is possible that as children get older the earlier optimism of parents wanes, while teachers continue to hold the same expectations.

This hypothesis is strengthened by the results of two further studies. Savage (1977) found that while both teachers and parents tended to anticipate that moderately retarded adolescents would become more independent by the time they were 25 years old, teachers tended to be more optimistic than parents about the future. Savage comments that this may reflect teacher's confidence in their skill to teach independence skills, and points out that there are differences in the type and levels of attributes that parents and teachers think important in these children, which will affect caretakers' ratings. Koster (1978) also found that, in terms of career education, as children get older, so teachers become more hopeful, but this is not the case with mothers.

Of equal importance is Rosenberg's (1979) finding that both parents and teachers underestimated the actual performance on a variety of tasks that the handicapped adolescents were asked to do. This suggests the possibility that parents and teachers may restrict children from carrying out tasks which the children are capable of doing.

The studies of Berson (1975) and Nihira et al (1981) indicate the importance of home variables and parental influences on children's behaviour at school. However, in terms of children's pro-social and aggressive behaviour at school, their findings are at complete variance with regard to the importance of parental control. Berson found that EMR children who perceived their parents as controlling tended to rate themselves higher on self-perceived popularity which correlated highly with teachers' ratings on their pro-social behaviour. There was also a negative correlation between parental control and aggressive behaviour at school. Berson suggested that parents of EMR adolescents may need to extend the time they control their children beyond that of normal children so giving EMR children a sense of security.



In contrast, parental control was shown to correlate significantly with misbehaviour and social maladjustment at school amongst the TMR children in Nihira's study. In part the difference may be explained both in terms of the different age range and degree of retardation of the children in these two studies. Berson's subjects were EMR 12 to 19 year olds, while Nihira et al looked at TMR children who were from 9 to 16 years. It is likely that the independence of parental control that the younger and more handicapped group experienced was probably less than that experienced by the older, less handicapped group. However, both studies suggest that the balance between adequate control and encouragement to be independent and mature in these children and adolescents is difficult to find, and will be reflected in the children's behaviour at school.

Overall, the studies of parents' and teachers' perceptions of handicapped children's social and independence skills show that they often differ, but that the direction of the difference is not consistent. It would, however, appear that as children get older so mothers begin to feel less than optimistic about the future, while teachers, perhaps relying on their skills to teach, are more hopeful. Even so, when parents' and teachers' predictions have been compared with the performance of handicapped children directly, then both tend to underestimate the children's ability.

## 2.5 FINAL CONCLUSIONS

In tying together the complex findings of the studies reviewed, perhaps the overriding impression gained is that there is no coherent literature which centres on parent and teacher perceptions of handicapped children. Warnock (1978) and Mittler (1979a, 1979b), amongst others, comment on the importance of involving parents in the education of their handicapped children. As has become apparent, there is a dearth of research which has either described the different perspectives of parents and teachers, or considered the underlying processes involved which give rise to misunderstandings that have been expressed informally from time to time by parents and teachers.

It is difficult to state any general, unequivocal trends based on the available evidence. This is partly due to different inde-

pendent and dependent variables being used in various studies. Subjects have ranged from severely retarded to borderline, their ages between 6 months and the yearly twenties.

Some studies have looked at parent' attitudes (with or without direct observations or testing of the children), sometimes teachers, and sometimes both together. Test instruments and measures used have also varied considerably. Specific skills in academic fields, physical development, personal and social responsibilities have been researched, as have a more comprehensive range of these skills.

Most clearly, it has been teachers' perceptions of and their behaviour towards handicapped children around which the majority of research has centred, with fewer studies looking at parental perceptions, and very few comparative studies. Not only is it probably more difficult to involve parents in research, particularly observational studies, but the situation also undoubtedly reflects the past concern and attitudes that teachers were central in the process of educating handicapped (and indeed normal) children, with the parents' role seen as minimal.

The Introduction underlined the changing attitudes towards the ESN child (and other mentally handicapped people) throughout history. At present, parents have been given nominally more say in the education of their handicapped children than at any other time this century. In view of the importance of parental involvement in the assessment of needs of handicapped children within the new education legislation, mothers' and teachers' cooperation together, with their shared understanding of ESN(M) children's social and independence (as well as academic) skills, seems vital in the overall effectiveness of special education. The issues raised in the early part of the Introduction with regard to different levels in a hierarchy of attitudes are particularly relevant and need to be borne in mind here, for attitudes towards control, the individual liberty of a child, albeit handicapped, and society's responsibility will affect the way mothers and teachers perceive the same ESN (M) child (Cerreto, 1981). Different attitudes are important, because they will lead people to ask different kinds of

questions about the child and the environment in which he is educated and lives.

Studies of teacher expectations indicated that there are many factors which contribute to teachers' attitudes, and environmental pressures interacting with personal experience (Cohen and Manion, 1980), which may explain the lack of consistent trends as to the effects of their attitudes on the behaviour of handicapped children in the studies reviewed. However, while there appeared to be only weak evidence supporting a link between their attitudes and children's behaviour in experimental studies (e.g. Rosenthal and Jacobson, 1968), when expectations occur naturally there is a greater likelihood of a corresponding change in their behaviour and in the children's performance as both Rist (1970) and Nash (1973) have shown. In addition, Nash has shown that children appear to be well aware of their teacher's expectations.

With regard to parents, the tentative links found in the classroom between the perceptions and behaviour of teachers and children's performance were not duplicated by Organist's study (1971) of parents and their EMR adolescents. It is possible that this may be because he measured parental behaviour not by direct observation but by reports from parents about what they did. It is possible that observations would have revealed subtle ways in which parents show their attitudes towards their children's behaviour and capabilities.

On the other hand, on the evidence of her research in a laboratory setting on a small number of children, Hunt (1980, 1982) proposes that mothers tend to take over in problem-solving situations when their children are dependent, but not when the children are judged independent, implying a link between their perceptions of their children and their behaviour towards them. However, the direction of the causal link between the children's and mothers' behaviour cannot be assumed. It is more likely to be a reciprocal interactive process, and this indeed is true of all the studies reviewed where expectations etc. have occurred naturally.

The comparative studies reviewed here indicated that parents and teachers show some agreement in terms of present academic levels

in handicapped children, although parents tend to show some optimism when predicting the future performance of their children.

However, the major conclusion which can be drawn is that there are differences in estimates of the same children's social and independence skills. The trend is not consistent. Both mothers and teachers have been found to be more or less optimistic.

An important variable with regard to this appears to be the child's age. It would seem that mothers with younger children or adolescents mothers are equally or more optimistic in their perceptions of their children than teachers (Mealor and Richmond, 1980; Prout et al, 1978), but as the children get older, so mothers are less optimistic and tend to underestimate compared with teachers (Rosenberg, 1979). Certainly, when parents predict future attainments, they show more concern about children's independence than do teachers.

Another variable might be the degree of the child's handicap. However, the Comparative Analysis of parents' and teachers' perceptions indicated that whether children were mildly or severely handicapped did not consistently affect mothers or teachers being more optimistic.

In addition, where children's actual behaviour has been compared to their performance, there are also conflicting findings. Children have been found to function down to the level of their parents' expectations (Landman, 1978), but also to perform better than either parents or teachers anticipate (Rosenberg, 1979). At the same time, as Landman has shown, optimism (or high expectancy) about a child's ability may encourage independence, a finding which is in line with Rosenthal and Jacobson's initial hypothesis.

It is relevant to ask whether the disagreement between mothers and teachers as to social and independence skills would also be found in normal children. If there is disagreement, then the children's age may or may not be as important in affecting the extent of the difference between mothers' and teachers' perceptions. In addition, it is possible that normal children might not be as vulnerable to the contrasting information they receive at home and

at school, because their peer-group may play a more important role in framing their self-concept.

## 3.

STATEMENT OF PROBLEM

The conclusions from the Literature Review have shown that the area of social and independence skills is one where mothers and teachers of handicapped children show some disagreement, although the direction of the disagreement, e.g. whether mothers or teachers are more optimistic, appears to some extent to be a function of the child's age. It is assumed that a child's knowledge of himself will come from his interaction with his environment. Table 2.1 (page 64) shows the assumed causal links and interactions between the child and his social environment both at home and at school. The Literature Review has considered a number of studies which have tried to look at these various links both in the classroom and the home. It has shown that there is limited evidence to support a model where the teacher's knowledge of mental handicap and a particular child is likely to affect how the teacher perceives the child's behaviour which in turn will affect the teacher's behaviour towards the child. As the child is aware of the teacher's behaviour, so he will respond accordingly, and his behaviour will reinforce or modify the teacher's original predictions or perception of the child's capabilities. However, there has been less evidence to support the assumed interactions and causal links from studies of parent perceptions of their own children, although it seems likely that the same processes occur in the home as in the school.

The problem, then, is to consider the ESN (M) child within these two different environments in order to examine the processes which may affect and be affected by his behaviour.

The problem can be broken down into a number of areas for investigation.

3.1.1 The Behavioural Environment

Do ESN(M) children experience different types of social interactions at home and at school? If they do, they are likely to respond differently in either situation, although certain aspects of their behaviour may remain stable across situations. On the other hand, even if the social environment at home and at school is similar, this does not mean that children will necessarily

behave in the same way in either location. Where there are differences, in either the children's behaviour or the interactions they experience, it is relevant to examine what these differences are. In addition, it seems pertinent to see whether the observed patterns of behaviour between ESN(M) children and their mothers and teachers are also found with normal children. Are possible differences general to most normal children or specific to the ESN(M)?

### 3.1.2 Perceived Skills

Because there are likely to be some differences in the way children behave at home and at school, it is possible that mothers and teachers will assess certain ESN(M) children's social and independence skills differently. If they do, to what extent do they differ and in which specific areas? Also, where do they agree? Reasons which mothers and teachers may give to explain poor attainment in certain skills may also differ. What are the reasons that mothers and teachers give? It is also relevant to establish whether disagreements in assessments of ESN(M) children are seen in the assessment of normal children.

### 3.1.3 Frame of Reference

As I have discussed in the Introduction and literature review, mothers and teachers may have different knowledge about mental handicap and thus have different frames of reference to judge ESN(M) children. This is likely to affect their interpretation of the children's behaviour, even when the children behave similarly at home and at school. One may therefore ask whether mothers and teachers have different frames of reference for judging ESN(M) children? And, if so, in what aspects? At the same time, where do they agree? Are these differences also reflected in the mothers and teachers of normal children? In addition, it is possible to see if mothers of ESN(M) and Normal children assess their children in the same way, using similar frames of reference. This can also be asked of the teachers.

Finally, it is relevant to look at the links between the frames of reference, behavioural interactions and assessments made by mothers and teachers. For example, what does a mother mean in

terms of skills when she construes her child as friendly compared to other children? Is there a relationship between her and her child's observed behaviour at home and how she assesses her skills? If so, what is the relationship?

### 3.2 The Present Study

It was the aim of this study to address some of these questions. ESN(M) and Normal children were observed at home with their mothers and at school with their teachers. Mothers and teachers assessed children's skills by completing a questionnaire. They also completed a repertory grid which it was hoped would clarify how they judged the target children in comparison with other children generally in terms of social maturity.

#### 3.2.1 Major Hypotheses

- 1) Mothers and teachers of ESN(M) children would perceive these children differently in terms of social maturity (two-tail).
- 2) Mothers and teachers of Normal children would perceive Normal children differently in terms of social maturity (two-tail).
- 3) Mothers of ESN(M) children would perceive ESN(M) children in negative terms compared to how Normal children were perceived by their mothers (one-tail).
- 4) Teachers of ESN(M) children would perceive ESN(M) children in negative terms compared with how Normal children were perceived by their teachers (one-tail).
- 5) That mothers of ESN(M) children would rate specific social skills displayed by their children (as a group) in more negative terms than the children's teachers (one-tail).
- 6) That mothers of ESN(M) children would rate specific independence skills displayed by their children (as a group) in more negative terms than the children's teachers (one-tail).
- 7) That mothers of Normal children would rate specific independence and social skills in more negative terms than the children's teachers (One-tail).
- 8) There would be a positive correlation between mothers' assessment of their ESN(M) children's specific social and independence skills and teachers' assessments (one-tail).
- 9) There would be a positive correlation between mothers' assessment of their Normal children's specific social and



- independence skills and teachers' assessments (one-tail).
- 10) ESN(M) children would behave differently at home and at school (two-tail).
  - 11) ESN(M) children would experience different behavioural environments at home and at school (two-tail).
  - 12) Normal children would behave differently at home and at school (two-tail).
  - 13) Normal children would experience different behavioural environments at home and at school (two-tail).
  - 14) ESN(M) and Normal children would behave differently at home (two-tail).
  - 15) ESN(M) and Normal children would experience different behavioural environments at home (two-tail).
  - 16) ESN(M) and Normal children would behave differently at school (two-tail).
  - 17) ESN(M) and Normal children would experience different behavioural environments at school (two-tail).
  - 18) That the reasons given by mothers and teachers for non-occurrence of behaviour would differ for ESN (M) and Normal children (two-tail).

### 3.3 Secondary Hypotheses

Various other factors were considered to ascertain their possible influence on the results.

#### 3.3.1 Socio-economic class

Although this was not at a significant level, it will be seen that there was a disproportionate tendency for ESN(M) children to come from working class homes (15 out of 19) as compared to Normal children (8 out of 18). It has been suggested (Newson and Newson, 1970) that there are differences between middle and working class children's upbringing in as much as middle class children are more future oriented, lead more sheltered lives, and are subjected to different types of parental control, as well as expected to learn communication skills earlier.

It was therefore hypothesised that:

- 1) Middle class and working class children would be perceived differently by their mothers (two-tail).

- 2) Middle class and working class children would be construed differently by their teachers (two-tail).

In addition, a number of questions were asked of mothers and teachers assessed middle class children differently. Questions covered evening, having own door key, etc. It was also hypothesised that:

- 3) Middle class and working class children would experience different behavioural patterns at school (two-tail).
- 4) Middle class and working class children would behave differently at home and at school (two-tail).

### 3.3.2 Child's sex

In view of continuing stereotypical roles in children's upbringing, it was thought an important factor in determining how children were perceived. It was hypothesised that:

- 1) Boys and girls would be perceived differently by their mothers (two-tail).
- 2) Boys and girls would be perceived differently by their teachers (two-tail).

Questions covering self-care, being allowed out in the evening, with practical problems and for the future were considered for the effect of child's sex. It was also hypothesised that:

- 3) Girls and boys would experience different behavioural patterns in both environments both at home and at school (two-tail).
- 4) Girls and boys would behave differently at both home and at school (two-tail).

### 3.3.3 Child's age

It will be seen that the ESN (M) children were older than the Normal children by six months, but not significantly. Because one hypothesis was that the ESN (M) children would be generally seen as less mature than Normal children, this age difference might reduce the expected difference.

children would be construed differently (two-tail).

was analysed to see if mothers of middle class children differed from working class children in their perceptions, going out in the evening, having own door key, etc. for the future. It was hypothesised that:

- 3) Middle class and working class children would experience different behavioural patterns both at home and at school (two-tail).
- 4) Middle class and working class children would behave differently at home and at school (two-tail).

equal roles in children's upbringing. It was thought an important factor in determining how children's sex might be perceived. It was hypothesised that:

- 1) Boys and girls would be perceived differently by their mothers (two-tail).
- 2) Boys and girls would be perceived differently by their teachers (two-tail).

Questions covering self-care, being allowed out in the evening, with practical problems and for the future were considered for the effect of child's sex. It was also hypothesised that:

- 3) Girls and boys would experience different behavioural patterns in both environments both at home and at school (two-tail).
- 4) Girls and boys would behave differently at both home and at school (two-tail).

The children's age was analysed to see if it affected mothers' and teachers' assessments. Questions considered economic and domestic skills; travelling, going out in the evening; playing away from home; dating and knowledge of sex; sensitivity to others; coping with crises, both personal and social; and work skills and planning for the future. It was hypothesised that:

- 1) Older and younger children would experience different behavioural environments at both home and at school (two-tail).
- 2) Older and younger children would behave differently both at home and at school (two-tail).

#### 3.3.4 Family size and birth order

It was hypothesised that the number of siblings and the target child's birth order would affect how mothers and teachers assessed some of their skills. Questions considered covered helping in domestic tasks, getting on with others, dating and knowledge of sex, sensitivity to others and coping without having own way.

#### 3.3.5 Teacher's sex

Children were to be observed with the mother present (but not necessarily with the father). It was felt they might react differently to men and women, so the effect of the teacher's sex on the children's behaviour was considered.

- 1) It was hypothesised that both ESN(M) and Normal children would behave differently with male and female teachers (two-tail).
- 2) It was hypothesised that both ESN(M) and Normal children would experience different behavioural environments from male and female teachers (two-tail).

4.

METHODOLOGY

The present study used three methods to look at mothers' and teachers' perceptions of children with moderate learning difficulties and how these related to the children's behaviour at home with the mother and in the class with the teacher. The methods were: 1) Observations of the children at home and at school; 2) Questionnaires to parents and teachers; and 3) Repertory Grids to parents and teachers. Each method will be dealt with individually under a separate section, but it is first appropriate to describe the sample.

4.1 Sample

Children, their mothers and teachers were drawn from seven inner city schools (four E.S.N.(M) and three normal comprehensives). Selection of schools was made by the Inner London Education Authority (ILEA). Head teachers were approached by ILEA and asked to participate. After an initial visit to the head and to teachers, the schools circulated a simple introductory standard letter (Appendix 1) to parents of children who were suitable, and whose teachers agreed to participate. The initial criteria for choosing the children were:

- a) Age between 12 and 15 years
- b) Exclude single-parent children
- c) English is the major language spoken by the family
- d) For the convenience of individual teachers, no teacher should have more than three to four children selected from her class
- e) i) Children with Moderate Learning Difficulties  
 IQ between 50 and 70 when available  
ii) Normal children

Taken from comprehensive schools.

In practice, at some point, all these criteria were broken. This was apparent from the earliest visits to the first school. It appeared that the schools were not always aware of the child's home background in detail. Eventually, all children with moderate learning difficulties whose parents agreed to participate were included, as it was apparent that the criteria were being regularly broken to a limited extent in all schools. In the control

sample a few children whose parents had agreed were eliminated as they were of a different ethnic origin (Chinese) from any of the children in the experimental sample.

The sample is also biased because of the screening process carried out by the education authority which chose the schools which could be involved; and by the schools' choice over parents to be approached. The former was unavoidable, as schools would have been unable to co-operate otherwise. In the latter case it was felt that, because of the necessary time-consuming involvement by schools and teachers, this bias was preferable to having a school and staff who might feel less willing to co-operate if their most difficult pupils were under scrutiny from an outside agency. It can also be argued that such bias might lean towards more conservative results, so that any significant differences between parents' and teachers' perceptions would be particularly noteworthy.

About 50 percent of all parents approached by letter agreed in writing to participate. When the letters of agreement were received parents were visited individually, their involvement was explained, and they were then given the opportunity to withdraw. Only two families backed down at this stage, i) because the mother had at first agreed without the knowledge of her husband, who did not wish to be involved, and ii) the parents had understood that the researcher would help in an intervention programme and did not wish to be involved solely in research.

#### 4.1.1 Major Variables

##### a) Home or School Assessment (Location)

The major variable in the study was whether mothers and teachers assessed and perceived the same children differently. Table 4.1 gives the number of mothers and teachers.

##### b) ESN (M) and Normal Children (Group)

Along with a) above, the child's group, ESN (M) or Normal, was also felt to be an important factor. Although all the children with moderate learning difficulties came from ESN (M) schools, it is important to remember that they did not necessarily represent a clearly defined group in psychometric or behavioural terms. This

point has already been discussed in the Introduction. Placement of children in ESN (M) schools may be affected by a number of factors, including variations in the referral criteria of teachers in normal schools, screening procedures, placement strategies, availability of resources (MacMillan, Meyers and Manson, 1974). Children from ESN (M) schools will hereafter be referred to as ESN (M) children.

Table 4.1 shows the breakdown of the two major variables. In all, data was collected from 26 ESN (M) and 18 Normal children. For seven of the ESN (M) children, data were incomplete, so analysis was carried out solely on 19 ESN (M) and 18 Normal children and all further breakdowns of variables will be only on children with complete data.

TABLE 4.1

NUMBERS OF MOTHERS AND TEACHERS IN THE FINAL ANALYSIS

Child's group	Mothers	Teachers*
ESN (M)	19	12
Normal	18	10
Total	37	22

(\*Some teachers had more than one subject in their classes)

The remainder of the variables can be broken down into three main groups:

- 1) Those related to the child
- 2) Those related to the school/teacher
- 3) Those related to the family.

4.1.2 Child Variables

a) Sex

There were nine ESN (M) and eight Normal boys, and ten ESN (M) and ten Normal girls.

TABLE 4.2

## AGE OF ESN (M) AND NORMAL CHILDREN

	Mean	Standard Deviation	N
ESN (M)	(162 months) 13 years 6 months	11.2 months	19
Normal	(156 months) 13 years	14.94 months	18
NS	t = 1.23	df = 35 Two-tail	

b) Age (Table 4.2)

The initial plan was to control exactly for age. Table 4.2 above shows that ESN (M) children were older than the Normal group of children by 6 months but not significantly so. However, the difference might possibly reduce the effect of any differences between perceptions of the two groups of children, as it is hypothesised that Normal children would be seen as generally more competent than handicapped children of the same age.

c) Ethnic origin

Table 4.3 shows the distribution across sex and status of the ethnic origin of the children.

TABLE 4.3

## ETHNIC ORIGIN OF ESN (M) AND NORMAL CHILDREN

Status	Caucasian 1	Afro-Caribbean 2	African Asian 3	Combined 2 and 3
ESN (M)				
Boys	7	2	-	2
Girls	8	2		2
Normal				
Boys	6	1	1	2
Girls	6	2	2	4

d) IQ

Although IQ measures were not taken, it was hoped that some measure of intelligence quotient would be available from the school records. There were records for all but three of the ESN (M) children in the sample who had had IQ measures taken at some time in their school life. Table 4.4 gives the breakdown across sex.

TABLE 4.4

IQ SCORES OF ESN (M) CHILDREN

	IQ Score		Years since last test	
	Mean (N)	Sd	Mean (N)	Range
Boys	59 (7)	13.15	6.50 (6)	1-15
Girls	65 (9)	9.44	4.125 (8)	1-6
Total	63 (16)		5.143 (14)	
NS	t = 0.42 (df = 14) (Two-tailed)			

Where IQ had been recorded, there were two cases when it was impossible to ascertain the date on which the measures had been taken. There was no significant difference between boys' and girls' scores. Some children had not been tested for 10 years. Even for those children who had been tested within the last year, none had been tested within the last seven months. This means that the scores may have been unreliable measures of their present cognitive functioning.

With regard to the Normal children, only one of the three schools which participated allowed access to the school records.

In view of the incomplete data from the Normal children, this variable was excluded from the analysis.

4.1.3 School/Teacher Variablesa) Schools

Four ESN (M) and three Normal schools agreed to participate. The schools selected by ILEA were scattered around London. Table 4.5 gives the number and sex of teachers from each school which par-



ticipated, and the number of children who were involved from each school. The three Normal schools were mixed-sex schools (5, 6, 7). School No. 3 was a girls' school (ESN (M)), and No. 4 was a boys' school (ESN (M)). The children were distributed evenly over the ESN (M) schools, but in the case of the Normal schools ten children came from a single school, six from another, and only two from the third.

TABLE 4.5  
SEX AND NUMBER OF TEACHERS AND PUPILS PARTICIPATING ACROSS SCHOOLS

Schools and Type	ESN (M)						Normal					
	Teachers		Tot- al	Children		Tot- al	Teachers		Tot- al	Children		Tot- al
	Male	Female		Male	Female		Male	Female		Male	Female	
1ESN(M) Mixed	1	2	3	2	3	5	/	/	/	/	/	/
2ESN(M) Mixed	2	1	3	3	3	6	/	/	/	/	/	/
3ESN(M) Girls	1	2	3	0	4	4	/	/	/	/	/	/
4ESN(M) Boys	2	1	3	4	0	4	/	/	/	/	/	/
5Normal	/	/	/	/	/	/	2	3	5	3	7	10
6Normal	/	/	/	/	/	/	1	3	4	4	2	6
7Normal	/	/	/	/	/	/	0	1	1	1	1	2
Total	6	6	12	9	10	19	3	7	10	8	10	18

b) Teachers' sex

Table 4.5 shows that in the ESN (M) schools the same number of men and women teachers participated in the research (6:6). In the Normal schools only three of the ten participating teachers were men. Because children were being observed with their mothers at home, it was felt that they might respond differently to male or female teachers.

c) Years teachers had known the target children

Because it was felt that the longer the teacher had known a child the more he was likely to know about the child's social and independence skills, each teacher was asked how long he had taught the child involved.

TABLE 4.6

NUMBER OF TERMS CHILD WAS KNOWN TO TEACHER

Group	Mean terms (N)	Range
ESN (M)	3.8 (19)	1 - 15
Normal	3.7 (18)	1 - 7

It will be seen that, although the average length of time was the same between ESN (M) and Normal, one teacher of the ESN (M) children had known one of the children for five years (15 terms). Excluding this extreme finding, teachers of ESN (M) children had known the target children for an average of 3.2 terms - half a term less than teachers of Normal children.

d) Numbers of children observed with each teacher

It had been hoped that each teacher would only have to be observed and answer questions on three children, as it was felt their time was already very full. Some teachers agreed to as many as four of the target children being in their class. Because of the varying number of children in teachers' classes, this variable has been dropped from the analysis.

However, it is noticeable that the number of ESN (M) children assessed by women teachers was only eight out of 19, while 13 of the 18 Normal children were assessed by women teachers.

4.1.4 Family variablesa) Number of siblings

The mean number of siblings in each family was 2.21 for the ESN (M) group and 2.6 for the Normal group. Broken down to distinguish brothers and sisters, the data are given in Table 4.7.

TABLE 4.7

SIBLINGS OF TARGET CHILDREN

Siblings	ESN (M) (N=19)		Normal (N=18)	
	Mean	Range	Mean	Range
Boys	1.05	0 - 3	1.3	1 - 3
Girls	1.16	0 - 3	1.3	1 - 3
Total	2.21	0 - 5	2.6	1 - 5

b) Birth order

Because of the small sample, the children's birth order was constricted to four categories oldest, youngest, only child and other. Table 4.8 gives the distributions.

TABLE 4.8

BIRTH ORDER OF TARGET CHILDREN

Status	Only Child	Eldest	Middle	Youngest
ESN (M)	2	6	1	10
Normal	0	4	8	(inc. 1 twin) 6

The ESN (M) child who was a twin was a boy who had a Normal sister.

c) Socio-Economic Class

Socio-economic class was estimated solely on the father's occupation (except in single parent families, where it was estimated on the mother's occupation), as categorised by 'The Classification of Occupations 1980' (London, HMSO). Originally the occupations were divided into four categories, but because of the low sample size, the categories were collapsed into two, middle and working class. Because class was felt to be an important variable, it had been

planned to match on class, so that both groups of children would be evenly split between classes. However, the difficulty in getting suitable subjects resulted in uneven distribution, as illustrated in Table 4.9. There was no significant difference between the ESN (M) and Normal children when considered just in terms of middle or working class. However, looking at distribution of children across the original four classes, it will be seen that 15 of the 19 ESN (M) children were in classes 4 and 5, as compared to only three of the 18 Normal children.

TABLE 4.9

SOCIO-ECONOMIC CLASS OF CHILDREN

	ESN (M)	Normal
Class 1 and 2	2	4
Class 3 Non-manual	2	6
Total middle class	4	10
Class 3 manual	0	5
Class 4 and 5	15	3
Total working class	15	8
Chi Sq. = 3.326 (df = 1, two-tailed N.S.)		

d) Single or Two-Parent Families

When schools were approached all were asked to select children who came from two-parent families. Once parents had agreed in writing to participate, observations in the classrooms began. Parents were frequently not given the questionnaire to complete until all the school data had been collected, and always after the home observations had been completed. It was at this stage that it became apparent that there were a few single-parent families. As home observations were, in general, in the late afternoon, the absence of the father was quite frequent, even in two-parent families. Because of the difficulty in getting the sample, it was decided not to exclude single parent families from the sample.

Three of the ESN (M) children were from single-parent homes (working class), and three of the Normal children were from single-parent homes (two working class, one middle class). Although the figures are too small to be analysed as a separate factor, it illustrates that schools are not always aware of children's parental background, whether they are ESN (M) or Normal.

In summary, 19 ESN (M) children (nine boys, ten girls; 15 working class, four middle class) with an average age of 13.6 years participated from four inner London (ESN (M)) schools. The Normal children (eight boys, ten girls; ten working class, eight middle class) came from three inner London comprehensive schools.

#### 4.2 METHODOLOGY: Observations

##### 4.2.1 Rationale

In a small undergraduate project I considered how parents and teachers rated 16 Down's Syndrome children on the PAC Scales (Gunzburg and Sinson, 1973), and found that, for the section titled social skills, parents and teachers had rated the children differently ( $P < 0.01$ ) (Middleton, 1980). This finding begged a question. Did the children's social behaviour differ considerably between home and school, or did parents and teachers perceive the same kind of behaviour differently? Since the children's behaviour was not observed, it is likely that there was an interaction between the environments of home and school, and the parents' and teachers' perceptions of the children.

As part of the present research, it was decided to observe children with their mothers at home and with teachers in the classroom. In addition, both mothers and teachers were asked to assess the child's social and independence skills (questionnaire to be discussed later), as well as looking at their attitudes and the frame of reference they employed to judge the child (repertory grids, to be discussed later.)

#### 4.2.2 Location of Observations

Apart from the very obvious practical difficulties with laboratory observations in the present study, it seemed most suitable to observe children in their natural environments. The overall social milieu of which either the mother or teacher was a part was a crucial factor in understanding the interaction to be observed.

#### 4.2.3 Method and Structure of Behavioural Units

The method of observation and the nature of what is to be observed are closely linked. It is crucial to the design and final findings to decide the unit of behaviour to be measured. Hartup (1979) sums up the issue as follows:-

"No ethogram exists to elucidate the manner in which social activity is organized across various levels of analysis. 'Lumpers' remain convinced that essential nuances are neglected when social relationships are described reductionalistically. 'Splitters' remain convinced that conditions under molecular elements appear and disappear within the integrated behaviour systems...(and). ..can be understood only through differentiated measurement....We contend, however, that this very integration of molecular units into more generalized behaviour systems is the occurrence that necessitates simultaneous study at different levels of analysis." (P. 25 and 26)

Ethological psychology has taken the molecular approach as its model. Observational studies concentrate on extremely subtle acts and aspects of behaviour (e.g. Blurton-Jones, 1972; Blurton-Jones and Leach, 1972; Blurton-Jones and Woodson, 1979) which have behaviour categories carefully and precisely coded prior to observations. Observations usually take place over a very limited period of time (Leach, 1972).

The ecological approach towards observing behaviour might be considered in terms of Hartup's category "lumpers" - i.e. molar units of behaviour are considered. Early proponents of ecological observations in natural settings were Barker and his associates in the Midwest project, USA, (Barker, 1968 and 1978) where detailed day-long observations of individual's behaviour in its natural setting were made.

Schoggen's (1978) clear summary of ecological psychology points to some of its basic assumptions. Above all, behaviour and environ-

ment are seen as being crucially interdependent, in that the social environment is created by those individuals inhabiting it and the individual's behaviour in turn can only really be understood when the social milieu or environment in which it takes place are also taken into consideration. The physical situation where the behaviour occurs is also considered important, i.e. appropriate behaviour displayed in the reading room of the British Museum is unlikely to be very similar to behaviour which is appropriate at an all-night disco. Barker (1978,b) goes so far as to claim that in their study of Midwest children (P.42)

"We could predict many aspects of children's behaviour more adequately from knowledge of the behaviour characteristics of 'places'...than from knowledge of the behaviour tendencies of the particular child."

The ecological approach would seem a particularly useful one in the present study in that the issue of disability and handicap (discussed in the Introduction) highlights the interaction between the individual who may have some inherent genetic, physical or congenital defect, and the social environment which designates a category of deviant people in comparison to a standard normality which in fact is influenced by social, moral and political judgments.

Methods of recording observational data vary from sampling pre-coded categories for frequency, sequence and/or duration by the use of event-recorders or paper and pencil; to video-recording activity which can be coded at a later date; to making a behaviour chronolog. Superficially, video-recording may appear to provide the best record of the behaviour or interaction of an individual, in that it can be verified and coded at a later date. However, the use of the machinery and equipment could be intrusive and may make participants self-conscious, certainly if they wish to move around. Secondly, the video camera can only be directed on one particular event at a time, which means other highly relevant material may be omitted, particularly as in the present research, when the adult and child who are participating may not be in close enough proximity to view them both at the same time on the camera.

#### 4.2.4 The Chronolog

A chronolog of behaviour as exemplified by Barker et al (1978)

seemed to be a useful method of observing molar behaviour of children with their mothers and teachers in a naturalistic setting with as little intrusion by the observer as possible, at the same time allowing for a rich source of data.

The chronolog is a running narrative of the stream of an individual's behaviour, ideally recorded (using a pencil and paper) by two people simultaneously stretching over a period of at least 30 minutes, which can be transcribed immediately afterwards so that both records can be married together to give as complete and accurate record as possible. The most famous of these chronologs is probably the "Day in the life of Mary Ennis" (Barker et al, 1978), the record from waking to sleeping of a young girl at home and at school in Midwest USA recorded in total by a succession of different observers throughout the day. Everything Mary did during the day was recorded with the proviso that only low level inference of her behaviour was made, as obviously feelings and motives could not be observed. The social and physical environment, and the people around her etc. were also noted.

Barker (1968) describes important factors of the units of behaviour recorded by this method as being 1) the behaviour unit is self-generated by the participant rather than manipulated by the observer; 2) it is located in a specific place at a specific time; and 3) the boundaries of the units occur naturally as opposed to being imposed by the researcher.

#### 4.2.5 Pilot Observations

In order to familiarise myself with the use of the chronolog, I spent three weeks in the secondary part of an ESN (M) school in a North London borough. After discussion with the Head and Form teacher of a class of 12 to 14 year olds, I followed a selected number of children through their day at school. A record was made of each child's behaviour - taking one child in turn for a day - so that in all 3 children were observed for 3 to 4 days each. Observation periods usually lasted for the length of the class, but on occasions it was possible to follow a child relatively unobtrusively from one class to another, thus observing out-of-class behaviour. Recordings were also made during the lunch hour and during break.



A transcript of the record of all behaviour was made and various methods of analysis and coding were considered. Apart from being invaluable experience in observing the structure of an ESN (M) child's day at school, the exercise was crucial in bringing out various important points with regard to recording, compiling and coding the behaviour.

#### 4.2.6 Method

##### a) Length of Observation

Unlike the Midwest studies, where two people recorded behaviour simultaneously, in the present study there was only one observer. This meant that in a number of important ways the present observations differed from those of Barker et al. In particular, the total length of time for observing each child was reduced to one hour at home and one hour at school. It was hoped that, within this period, at least some fairly consistent aspects of the mother/child and teacher/child interaction would be recorded.

##### b) Home

At home the hour's observation was generally made on a single day between 4.00 and 7.00 p.m., but on a few occasions later in the evening or earlier during the day in the school holidays or at weekends. In these cases, the time was chosen because mothers worked in the late afternoon or evening so they were out when their children returned home from school and did not get home until after 9.00 p.m., when it was felt that observations would have been difficult (the child was going to bed) or particularly intrusive and inappropriate to the family.

##### c) School

School observations were generally carried out on one or more days. In the ESN (M) schools, children generally remained with the same teacher for the majority of their lessons, so it was possible to make recordings of two sessions in the same day. In the Normal schools the observations were made when the children were being taught by those teachers who saw them most frequently during the week. This meant that children were observed during English, Maths, Science or French lessons which occurred regularly throughout the week. In one or two cases, when classes extended

over a double period which lasted for more than one hour, it was possible to record the whole hour period within a session.

d) Familiarisation

Each observation was preceded by at least an hour of familiarisation at both home and in the classroom. It was felt that a single period of familiarisation on a day prior to the recorded observation would reduce the effect of the observer at least in part. Hughes et al's (1979) study of recording children's conversations at home and at a nursery school, had researched the problem of observer effect and habituation. They concluded that it would be almost impossible to find absolutely conclusive evidence of total habituation to the presence of an observer over even a great number of visits. Their own study revealed that over 4 successive visits to a child's home, there appeared to be no significant differences in mother-child talk. This suggested that although families may have been as relatively natural on the first day as the fourth day, some observer effect did not habituate.

At school, observer effect was found to be different (Hughes et al, 1979). After a very quiet first day, there was considerably more teacher/child talk on the second day. This talk declined over the next two days.

In the present study there did not appear to be the same sudden appreciable increase in conversation at school between days 1 and 2, although this was not formally measured. Eventually a single period of 1 hour was used for familiarisation both at home and at school. After each observation period, the teacher or mother were asked whether the child's and family's/class's behaviour had been affected by my presence. In general, I was told that the session had been relatively normal. Of course, it is highly likely that the child's behaviour had been affected in part at least, and that mothers and teacher were also conscious of my presence, although not wishing to admit it.

In the hope of reducing the unease of having an observer within the class or home parents, teachers and the children involved were given the opportunity to ask any questions they liked prior to observations. The process, confidentiality and purpose of the

observations (and subsequent measures) were also explained. In addition, the first part of the introductory home/school visit which preceded the period of familiarisation was used to chat to the family and staff generally. They were also told they could see the transcripts of the observations. Only one or two children ever asked to see them. Although it may be argued that by creating some sort of friendly relationship with the family, teacher and child, the quality of observations was affected, this was thought preferable to remaining aloof, firstly on the grounds that there might have been a greater drop-out rate, and secondly that if the family/teacher felt relatively relaxed, it would be more likely that they behaved naturally. Apart from this, it seemed grossly inappropriate to ask families to let me into their homes and then refrain from normal conversational interaction. In most cases this approach appeared to have been appropriate. Occasionally, parents seemed to be making a special effort, but frequently family and classroom behaviour appeared to be natural and spontaneous.

#### 4.2.7 Coding

Although the original behaviour chronolog was specifically meant to be recorded as a running narrative to encompass as much behaviour and environmental influence as possible, with no precoded categories, with only a single observer certain restrictions on the behaviour to be recorded had to be made.

##### a) Focus of observations

The interaction between the child and his mother/teacher was the specific focus of attention. However, both at home and particularly in the classroom, there were occasions when there was no interaction at all between the child and the adult. At home general conversation with and between other members of the household, and at school the teacher's behaviour to the class in general and other specific children as well as the child's behaviour to other children was also briefly noted. If there was a clash - i.e. the child chatted to his neighbour at school at the same time as the teacher was helping another child, then the child's behaviour was focussed upon rather than the teacher's, although generally it was possible to note both interactions.

### b) Coding categories

The recordings of behaviour were broken down into units of a minute and in the statistical analysis, frequencies of behaviour falling into specific codes were counted. It might well be argued that recording behaviour directly into precoded categories would have been more parsimonious. Certainly every hour of behaviour recorded took three to four and a half hours to transcribe and code. Thus considerable time would have been saved if precoded categories had been used in recording behaviour. However, taking a behaviour chronolog enables one to go back to the data and look at sequences and duration of behaviour as well as other variables, if desired, at a later date. In addition, reliability studies could be carried out on both the coding and the inter-observer agreement.

After the pilot observations had been transcribed, various methods of coding behaviour were considered. It was necessary to have the same coding categories both at home and at school, so that comparisons could be made between the child's reaction to the mother and teacher. After various attempts at compiling complex coding categories, that used by Barker et al (1978) in analysing a "Day in the Life of Mary Ennis" was taken and modified with regard to what Barker et al had termed as modes of social behaviour.

They broke down the interaction between Mary and her friends and associates into seven categories: 1) Dominance; 2) Nurturance; 3) Appeal; 4) Submission; 5) Resistance; 6) Aggression; and 7) Avoidance. Applying the categories to the observations in the pilot study, it became quickly apparent that the last three categories in particular were difficult to separate out. Eventually these three categories were collapsed into one, leaving five categories. Thus in all there were 20 categories of behaviour (10 adult and 10 child) which are described as follows:-

#### 1) Adult or Child Verbal Behaviour

Control: All cases where the adult or the child verbally controlled the situation in which the other was participating directly. This included commands, orders, directing the other what to do and positive criticism. Behaviour in this category

indicated that the adult/child expected the other to obey, or conform to the situation, with little or no option to do otherwise.

Care: All help, care and information to the other verbally. This also included praise, encouragement and prompting as well as general chatter. For the teacher in school this included the teacher teaching by explanation, reading out to the class, and teaching by rhetorical questions.

Appeal: All questions, requests and appeals for attention and verbal disturbance which was to gain attention of the other and initiate communication.

Acceptance: Verbal agreement with the other, verbal acceptance of the other's questions, appeals or attempts to control the situation.

Resistance: All instances where in effect the other's actions (verbal or non-verbal) are discouraged, refused, negated or denied. Also included is strong negative criticism and disagreement.

## 2) Adult or Child Non-Verbal Behaviour

Control: All non-verbal behaviour which effectively indicated that the perpetrator was controlling the situation. This included pointing to get the other to look at something, teaching by writing on the board, controlling a situation by removing something the other was involved with, turning TV/radio/tape-recorder on/off.

Care: All acts of affection, care that passed between adult and child. All acts of giving or offering help, food etc. Smiling, and laughter and looking as when the teacher/mother was ensuring the child was coping with a task or making sure they were all right; or watching the other when attention was not being sought. Looking at the other when adult/child was not directly talking to them.

Appeal: All instances of non-verbal behaviour which initiated/attempted to initiate interaction (e.g. beckoning) making any kind of non-verbal noise, approaching, touching and looking in the other's direction in order to get attention.

Acceptance: Looking at the other when being spoken to (i.e. appearing to listen), obeying the other's appeal or control,

agreeing by nodding etc. or doing as directed. For the child at school this was the category used to code the child when he was working as directed by the teacher.

Resistance: Appearing not to hear, ignoring the other, withdrawing, moving away with the intent to resist to control (e.g. the child running out of the room when being told to do something). In school, the child's behaviour in this category included being off task when the teacher had indicated what the class should be doing. All forms of non-verbal resistance, such as shaking head when being told to do something etc.

A behaviour was coded if it occurred once in any minute. Thus it was possible for any single sub-category of behaviour to have a maximum frequency of 60 for any set of observations. This meant that if a child was working without any interruption for a minute his behaviour would be coded once as non-verbal acceptance. If however he worked, looked up out of the window, worked again, looked at his neighbour and then worked again all within a minute, his behaviour would be coded once as non-verbal acceptance (ie. he was working) and once for non-verbal resistance (i.e. he was off task). This method obviously reduced the amount of changeability in his behaviour. As the total period of observation was for an hour, however, this method adequately indicated those children who were not distracted and did as they were told, and those who were frequently off task.

### c) Coding Reliability

As will be seen, these coding categories include some interpretative judgments as to the intent of the behaviour. Using the above criteria for coding, 220 minutes of observations were coded by two different raters and their agreement/disagreement of the occurrence/non-occurrence of each of the broad categories and sub-categories of behaviour was tested by Cohen's Kappa. This statistic is particularly useful in testing the reliability between two raters/observers as it takes into consideration agreed occurrences and non-occurrences and all disagreements. As a measure of reliability it is more rigorous than other reliability measures such as percentage agreements and correlational measures etc. Hartman (1977) suggests that a Kappa of 0.80 or above shows good

agreement across broad categories, and one of 0.60 or above for individual sub-categories.

Results of the coding reliabilities are summarised in Table 4.10. As will be seen for each of the major categories, reliabilities at .80 or just under were attained. In this case agreement between raters was taken when both raters coded the same category of behaviour in any minute. In other words agreement was taken to be when both coders had coded an act of behaviour as for example, the subcategory 'Control' within the broad category 'Adult Verbal Behaviour'. If both agreed it was adult verbal behaviour but allotted it to different sub-categories, this was recorded as a disagreement. When both coders agreed that there had been no adult verbal behaviour at all in a minute, then this was considered as agreed non-occurrence. Coding reliability on a broad category, such as 'Adult Verbal Behaviour' was therefore analysed taking into account all agreements (disagreements) on each of the five subcategories (Control, Care, Appeal, Acceptance and Resistance) and non-occurrence, in a 6 x 6 matrix.

A) Broad Behaviour Category

TABLE 4.10

SUMMARY OF CODING RELIABILITY

Behaviour Category	Cohen's Kappa
Adult Verbal	0.797
Child Verbal	0.798
Adult Non-Verbal	0.83
Child Non-Verbal	0.797

B) Sub-Categories of Behaviour (2 x 2 Matrix)

Kappa ranged from .60 to .91 for the 20 individual cells.

As well as looking at coding reliability on broad categories, each of the 20 individual subcategories (e.g. Adult Verbal Control etc.) were also analysed in a 2 x 2 matrix, which looked at agreed occurrence and non-occurrence, and disagreements. Agreed non-occurrence was when neither coder had coded a specific subcategory of behaviour in a minute. In some subcategories of behaviour

which occurred rarely, it has to be admitted that agreed non-occurrence heavily outweighed agreed occurrence, and thus it may be argued that the coding reliability scores should be accepted only tentatively, i.e. agreement was mostly based on the fact that the behaviour rarely occurred. This is particularly the case of Adult Verbal Acceptance, Child Verbal Control and Resistance, Adult Non-Verbal Acceptance and Child Non-Verbal Control.

#### 4.2.8 Inter-rater Reliability

In order to establish the reliability of observations, from time to time a second observer joined the observation periods. Initially, trial inter-observer reliability was carried out on a playground for handicapped children with a variety of second observers who were relatively untrained. Prior to observations, they were given written instructions and shown the coding categories into which behaviour would be allotted. This exercise was useful in establishing certain of the final criteria (already discussed), in determining the focus of behaviour observations, and how recordings could be made which were as uninterpretative as possible.

During the collection of the final data, there were three sessions of inter-rater reliability tests. The second observer during these tests remained the same throughout. The first period of observation was carried out at the playground as a trial run. A week or so later, in March 1982, 25 minutes were observed at one of the ESN (M) schools. In June, 1982, 60 minutes were recorded at one of the control schools. It had been hoped to complete a third session of one hour during the autumn of the same year, but difficulties at the school prevented this.

Before looking at the results of these two sessions, it is perhaps necessary to explain why no inter-observer reliability scores were carried out within the home. It was felt that the presence of a second person taking notes in the home would be very intrusive to the family, and cause such a disruption that observations would be extremely forced. It was also felt that as it was so difficult to get a sample of parents who would agree to take part in the research, the suggestion of bringing along a second observer might have tipped the balance against parents' participating.



Results of the two reliability studies are summarised in Table 4.11 over. Agreement/disagreement of occurrence/non-occurrence was scored as for the coding reliability above. It will be seen that across the four broad categories of behaviour, agreement improved for 'Adult Verbal Behaviour' and 'Adult Non-Verbal Behaviour' from March to June, but decreased for 'Child Verbal Behaviour' and 'Child Non-Verbal Behaviour'. It is difficult to account for this effect, except that the amount of the child's behaviour may have been proportionately less during the summer observations which could have affected the results. It may also be borne in mind that before the March test, there had been a trial observation session only a week or so prior, to train the second observer. Between March and June trials the second observer had had no further instruction or trial, except sight of the same instructions and coding categories prior to observations. It is highly likely that more extensive training in the observation procedure would have yielded higher reliability scores. Equally there could have been some observer drift for either observer.

When both the March and June sessions were totalled together, with agreement based on 85 minutes of observation, it will be seen that the reliability scores across 3 broad categories increased, and the fourth, Adult Non-Verbal Behaviour dropped to .65 (K). Thus overall, inter-observer reliability of the broad categories ranged from between .65 to .85 across the categories for a considerable period of time (85 minutes).

TABLE 4.11

SUMMARY OF INTER-OBSERVER RELIABILITY

A) Broad Behaviour Category (6 x 6 matrix of 5 sub-categories and non-occurrence)

Behaviour Category	Cohen's Kappa		
	March (25 mins.)	June (60 Mins.)	Total
Adult Verbal	0.63	0.66	0.67
Child Verbal	0.74	0.64	0.85
Adult Non-Verbal	0.59	0.68	0.65
Child Non-Verbal	0.84	0.65	0.72

B) Behaviour Sub-Categories (2 x 2 Matrix)

1) March Kappa ranged from 0.51 to 1.0 on 14 cells

No observations: Adult Verbal Acceptance  
 Child Verbal Control  
 Child Verbal Resistance  
 Adult Non-Verbal Care  
 Adult Non-Verbal Approach  
 Child Non-Verbal Control

2) June Kappa ranged from 0.51 to 1.0 on 13 cells

No observations: Adult Verbal Acceptance  
 Adult Verbal Resistance  
 Child Verbal Control  
 Child Verbal Care  
 Child Verbal Resistance  
 Child Non-Verbal Control

3) Total Scores Kappa ranged from 0.61 to 1.00 on 16 cells

No observations at all on:  
 Adult Verbal Resistance  
 Child Verbal Control  
 Child Verbal Resistance  
 Child Non-Verbal Control

Looking at the 20 sub-categories of behaviour (Table 4.11 B), individual cell agreement remained constant between K 0.51 and 1.0 between the March and June sessions for the majority of the cells. In March, behaviour in 6 of the cells was not observed, and in June, behaviour in four of these 6 cells plus 2 other cells was not observed. In addition, there was a Kappa of 0 (nil reliabili-

ty) for Child Verbal Approach when one observer recorded a single instance of this behaviour but the other observer did not.

Again, by combining the two periods of inter-observer recordings, the individual cell Kappas improved. For 16 of the 20 cells K was between 0.61 and 1.0. Four behaviours were not observed at all in the 85 minutes: 1) Adult Verbal Resistance; 2) Child Verbal Control; 3) Child Verbal Resistance; and 4) Child Non-Verbal Control. This has to be borne in mind when the analysis of results takes place. In fact, when this behaviour did occur, which was rarely, there was generally no doubt at all that the child was attempting to control the situation, or verbally resist it. Equally Adult Verbal Resistance (more frequent than the other three unobserved categories) was generally quite clearly recognisable.

In effect, reliabilities at such a specific level of analysis using Cohen's Kappa appear to be quite respectable. Scott (1980) claims that inter-observer reliabilities for narrative chronologs range from .83 to .89, but she is not explicit as to the precise nature of the statistic used nor whether this figure refers to the reliability across general categories of behaviour, or more specific behaviour units.

#### 4.2.9 Procedure

Once parents and teachers had agreed to participate, the observations took place prior to the administration of the questionnaires and repertory grids (to be discussed).

##### a) Home

Although the majority of parents who initially agreed to let me come to their homes for a preliminary talk agreed to participate fully when the full extent of the research was explained, a number were reluctant to let me observe in the home although they were quite happy to answer the questions and complete the repertory grid. Reluctance to allow observations was either expressed by outright refusal (in 3 cases) or inferred from apparent difficulties relating to finding the mother and child at home together when appointments had been made.

For the home observations, after being explained the general purpose of the research, the family was told that I wished to sit quietly in the corner of the room where the child and mother were most likely to be, and take notes of what they were doing. Should either the mother or the child leave the room, I would remain in the room with whoever stayed. If however, that person then also left the room to join the other in a different location, it was explained I would quietly follow them. In practice, I usually sat in the sitting room near the door, which in many cases gave me direct sight of the kitchen, which was where mother and child often went. If the child and mother were to be in the kitchen for most of the time to be observed, I sat in a corner of the kitchen.

Mothers and children (and any other family members or friends present) were asked to get on with what they were normally doing during the observation period, whether this was watching TV, cooking, talking, eating etc. They were also asked to ignore me during the observations, and to behave as if I were not there. Usually this worked quite well, although on occasions I would be asked a question, or offered a cup of tea or coffee. When this could not be deflected or ignored, observations were broken off for a few minutes. The greatest difficulty with regard to being ignored occurred with respect to animals who were interested in a stranger in the house and occasionally sat on me; and small children who at the least eyed me with some curiosity from time to time, and, on one memorable day, tickled my toes and bit me on the arm!

Provided the child and mother were somewhere in the home, garden or very near vicinity of the home, observations continued, as it was felt that the child's ability to be alone, or at least apart from his mother, and the mother's acceptance that the child need not be constantly supervised was an important variable.

#### b) School

The time available to explain to teachers the purpose of the research and what participation entailed varied greatly from school to school. Once this had taken place, I visited the

classroom with the teacher and sat in on the first available lesson when the child would be present. Usually I sat in the corner at the front of the class, so it was possible to view both the child and the teacher without any difficulty. On most occasions in the ESN (M) schools either the teacher explained that I had come to see how everyone was getting on, or I was given the opportunity to do so myself. This occurred only rarely in the control schools and often the class were given no explanation of my presence at all because the teacher said that the children were used to visitors and would hardly notice me.

After the observations were made, they were transcribed in full and coded as soon as possible, often on the same day and always within a week. Delay was caused when a number of observation periods occurred on a number of consecutive days in the schools and homes.

#### 4.3 METHODOLOGY: Questionnaire

##### 4.3.1. Introduction

It is obvious from the previous section on observations that only a limited amount of specific behaviour would be observed during the observation periods in the home and in the classroom. Besides, it was the form of the behaviour (e.g. control, care etc., verbal or non-verbal) between mothers/teachers and children that was to be focussed on particularly. The purpose of giving mothers and teachers a questionnaire was therefore threefold.

Firstly, it would be possible to consider a wider range of behaviours than could be observed in a single period of an hour. Secondly, it would be possible to compare: i) how mothers and teachers rated the same children's competency in certain skills; ii) the ratings of handicapped children given by their mothers with similar ratings given by mothers of normal children; and iii) the ratings of handicapped and normal children given by their teachers. Thirdly, it would be possible to look at selected areas of competence in specific skills and relate these both to the mother/child and teacher/child observed interactions, and to the mothers' and teachers' general perception of the child as socially mature to be derived from the repertory grids (to be discussed in the next section).

It was decided to look at a range of skills which would fall under two broad headings, Independence and Social Skills. These will be

discussed in more detail later in this section. The initial intention had been to ask questions only about specific skills relating directly to the ten constructs in the repertory grid. For example, if a child was perceived as friendly (a construct in the repertory grid) it was hoped that a number of questions relating specifically to acts of friendliness could be generated, e.g. an ability to keep and maintain friends, getting on with adults and children who were either known or strangers to the child.

Independent judges were given draft copies of the questionnaire and lists of the constructs, and asked to say which questions related to which constructs. Despite re-formulating the questions a number of times, and repeating this process, it was possible to produce only certain questions which were judged to be related specifically and exclusively to certain constructs. There was disagreement among independent judges about a number of questions which were felt to be important, but which were considered to be related to a number of constructs equally. For instance, question 12, about making a simple meal, was judged to be related to being practical, helpful and responsible, and occasionally independent (four of the ten constructs). If the original plan to use only questions which had correlated highly with a single construct had been carried out, some questions which would have provided interesting information about mothers' and teachers' perceptions of children's abilities would have been excluded. It was, therefore, finally decided that questions relating to various aspects of children's social life skills would be included in the questionnaire, irrespective of whether there appeared to be any clear or specific link with the constructs.

#### 4.3.2 Piloting

At various stages during the formulation of the questions, mothers and caretakers of handicapped children were asked to complete the questionnaire. The ambiguities in both the wording and meaning of some of the questions were excluded on the basis of pilot interviews.

#### 4.3.3 Social and Independence Skills

As has already been mentioned, the two main categories of behaviour which were considered were social and independence skills, and scoring and ratings scales etc. can be found in Appendix 2. This is not the exact format used in the research, as the rating scales were not included in the questionnaires which were given verbally to parents and teachers. In addition, for ease of administration, there was a separate questionnaire including all questions relevant to parents, and one including all questions relevant to teachers.

Questions were divided into six main sections.

##### a) Background Information

Mothers were asked about the child's age, siblings (sex and age), her own and her husband's occupation, and the family's country of origin. Teachers gave information about the child's last IQ scores, their judgement of the child's present IQ score, and the length of time the child had been known to them.

##### b) Practical Self Care

Questions in this section were thought to cover areas which were representative of the child's personal care, personal bodily needs, and everyday living skills.

###### Personal Care (9 questions)

Dressing, washing and bathing, and personal tidiness.

###### Economic Skills (11 questions)

Spending pocket money, budgeting and saving, understanding cash and the value of money, and shopping.

###### Domestic skills (21 questions)

Helping about the home (and classroom), making own bed, making hot drinks and cooking, and responsibility for daily tasks.

##### c) Independence

Here questions were divided into those where the child could display independence from home and ease of being away from home (Autonomy); and those relating to aspects of independence where the child showed the ability not to depend on others constantly for entertainment or security (Self-sufficiency).

Autonomy (17 questions)

Travelling alone for short or long distances, having own front door key, going out in the evening, and belonging to a club.

Self-Sufficiency (9 questions)

Being alone in the house, and playing alone outside.

d) Social Awareness

This section dealt with social skills, generally how children related to other people (Relationships); and, more specifically, their awareness of the other as a person with their own needs (Social Sensitivity).

Relationships (21 questions)

Friendships and acquaintances, getting on with adults and other children, getting on with pets/animals, interest in members of the opposite sex and dating, and knowledge about sex.

Social Sensitivity (8 questions)

Co-operation, interrupting others, sensitivity and judgment of other's feelings, and sharing and taking turns.

e) Unexpected and Crisis Situations

The inclusion of a few questions about unexpected or crisis situations, both at a personal and social level attempted to probe the child's ability to cope under stress.

Personal (10 questions)

Practical problems, coping with failure, not having own way, disappointment and criticism, and obedience to requests.

Social (6 questions)

Separation on outings, coping with minor incidents or an emergency, and use of telephone.

f) Occupation

This short section examined the children's ability to look beyond themselves and their immediate environment, both in time and space.

Alertness and interest(5 questions)

Interest in other people, curiosity about anything new, and interest in the news.



Work skills (3 questions)

Need for encouragement, concentration and ability to organise themselves.

Future plans (4 questions)

Plans for future employment, and how realistic these plans were.

In all, there were 127 questions, of which mothers were asked 124 and teachers were asked 92. This discrepancy arose because there were some questions relating to domestic chores which it was felt teachers would be unable to answer. In the full questionnaire (Appendix 2) it is clear which questions were given to mothers and which to teachers. However, there were 89 questions which were answered by both mothers and teachers.

4.3.4 Categories of Questions

Looking at the full questionnaire, it will be seen that questions fell into a number of different categories.

a) Questions of Occurrence

These were scored Yes, No, or Do not know.

e.g. 4a: Does X have pocket money?

b) Questions of Frequency

For example, 1a: Does X dress himself completely without help? Rated 1-5 (Always (daily): 1, to Never: 5).

It was felt that low frequencies might be taken to indicate attitudes towards the ESN (M) child, such as X rarely dresses himself completely because he is unable to do so.

c) Reasons for Non-Occurrence or low frequency

If the answers to 1) and 2) above were No, or Never/rarely respectively, mothers and teachers were asked for the possible reasons. This was to clarify whether non-occurrence or low frequency were caused by lack of opportunity, perceived incompetence, rearing practices etc. Although mothers and teachers talked at some length, their answers were probed in order to establish which was the major reason given for non-occurrence etc. There were three major categories of answers:

Reasons based within the child

S/he was ESN (M) (i.e. if most other children or siblings of his/her age were given the opportunity).

It was normal for a child of his/her age.

Child's personality (i.e. not because s/he was seen as handicapped, although s/he behaved differently from some children of her/his age).

Appropriate to the child's sex (e.g. stereotypic view of acceptable sex roles).

Reasons caused by caretaker's handling

School policy (e.g. individual classroom or school rules and management).

Family policy (e.g. ethnic, cultural factors, family discipline and structure; mother's (family's) anxiety which extended to all the children, e.g. mother made all the beds in the house).

Social Opportunity

(e.g. No clubs in the area; 'nobody in these flats goes out alone at night since someone was mugged' etc.)

d) Questions about Capability or Proficiency

Where children had the opportunity to display certain skills, they were rated from very good/well etc.(1) to very poor etc.(5). It was hoped that these questions in particular would indicate the degree of mother/teacher agreement or disparity in their assessment of the same children's skills.

e) Questions about Rater's anxiety Rated 1 to 5.

There were three questions relating to the mother's anxiety (1 question for teachers): about leaving the child alone in the house; letting the child have a door key; and about the child going out with a boy/girl friend. It was felt that children might have these opportunities because their mothers had no option but to leave them in the house alone etc., (particularly in the case of children whose parents both worked), irrespective of the mother's anxiety.

f) Questions relating to Coping Skills

These questions related specifically to types of behaviour displayed by the children when they were poor or very poor at coping with certain personal crises including failure, disappointment, not having their own way, and criticism or reproof.

4.3.5 Procedure

Questionnaires were administered verbally to mothers and teachers individually after observations had been made in the home or school, and prior to the administration of the repertory grid. Mothers or teachers were read each question and given the range of possible answers (e.g. very good, good, fair, poor or very poor). Where necessary, subjects were able to look at a second questionnaire as the questions were read out, in order to ensure that they clearly understood what was being asked.

Completion of the questionnaire took between 30 minutes and 1 hour and 15 minutes. Teachers generally took less time to complete the answers than mothers, partly because there were fewer questions, although it was presumed that they were also likely to have had greater experience of completing questionnaires than parents. Answers were transformed into rating scales after the interviews.

4.3.6 Questionnaire Reliability

It is appreciated that neither intra- nor inter-rater reliabilities were carried out on the questionnaires. As questionnaires were administered verbally by the researcher, returning to the children's homes and schools to ask mothers and father to complete a second identical questionnaire within a relatively short space of time would have entailed a very considerable extension of the time taken in data collection. At the same time, to obtain inter-rater reliabilities of children's behaviour at home would have required fathers to complete the questionnaire. This again would have increased the time taken in data collection. With regard to asking another teacher to rate the same children at school, certainly in the ESN (M) schools the teachers who completed the main questionnaire were those who taught the child for the major part of the day. Consequently, another teacher might have found it extremely difficult to answer the questions with any degree of accuracy.

#### 4.4 METHODOLOGY: Repertory Grids

The third measure used in this study was the repertory grid. Having observed children with their mothers and teachers, and having obtained mothers' and teachers' assessments of specific social and independence skills, the repertory grid appeared as a useful way of looking at a number of factors:

- a) the general frame of reference mothers and teachers used when judging social maturity;
- b) how they judged ESN (M) and Normal children's social maturity within this framework; and
- c) how the frame of reference for mothers of ESN (M) and Normal children differed from that of teachers of the same children.

It was felt that this analysis might also give some explanation of any inconsistencies between mothers' and teachers' assessments of specific skills and observed behaviour.

This section will include:

- a) a brief description of repertory grid technique;
- b) rationale for using repertory grid technique in this study;
- c) pre-pilot trial;
- d) compilation of the grid used in this study;
- e) description of the analyses;
- f) pilot grid.

Appendix 3 gives a brief, uncritical description of Personal Construct Psychology from which the repertory grid is derived.

##### 4.4.1 Repertory Grid Technique

As a clinician and therapist, Kelly (1955) was primarily concerned with the individual in therapy, and devised two therapeutic tools to help understand and bring about change in people's construct systems, and behaviour: a) the Self-Characterization sketch; and b) the Role Construct Rep Test. The Repertory Grid, an extension of the latter, has been used extensively in research in a variety of forms, and will be discussed here.

Bannister and Mair (1968, p.136) comment that a grid is:

"...any form of sorting task which allows for the assessment of relationships between constructs and which yields these primary data in a matrix form."

In effect it "intrinsically measures association" (op. cit.p.180) between constructs and the events which are rated.

Two of the corollaries (see Appendix 3) - the dichotomy and organisation corollaries - are particularly relevant to grids, because they refer to the structure of an individual's psychological construct system. The grid is a means of clarifying which constructs (decisions) an individual uses, how they are used to judge events, the relationships between constructs, and the relationships which the individual sees between events.

Firstly, we may see how an individual places various events along a single construct. Although the dichotomy corollary has been discussed (Appendix 3) in terms of discriminations between similar or dissimilar, Kelly does not imply that there is a logical clear-cut A/Not A choice, but rather there are many gradations between A and Not A.

However, as Adams-Webber (1979, p.157) points out, Kelly assumes a priori, that people will distribute their judgments of events evenly along a construct. This now appears to be questionable and distribution may be lopsided. Adams-Webber quotes (p.163) Osgood and Richards (1973) who suggest:-

"There is a universal tendency to communicate about the positive side of life."

Even when subjects have to place imaginary figures on a construct, lopsidedness may still occur. This may be particularly so when the individual is anxious (Fransella and Bannister, 1977, p.84).

In a repertory grid numerical values are assigned to the events (elements) judged on various constructs. The repertory grid is made up of elements as well as constructs. An element is any event(person, situation, inner feeling etc.) which we place on a construct, i.e. it is something about which we make a judgment e.g. Harry. However, an event etc. need not be an element exclusively, and at another time Like Harry/Unlike Harry could be used as a construct.

The relationships between the values can be analysed, and a rough picture of the relationships between constructs and events judged by them can be evaluated. In this way it is possible to construct what may be termed a 'personal space' or a map where the way in which events are judged in terms of constructs in the grid can be examined.

The personal space constructed from any one grid is limited to the particular constructs used, and the events which are judged by these constructs. Thus it may be that two constructs appear to be used in similar ways when looking at a particular set of elements, but when the constructs are used in conjunction with other elements they will be used very differently. Equally, two events may be seen in one grid to be judged as very different, but using different constructs in another grid, it may be seen that the events have many similarities. Thus the information about the individual's personal space is limited to the relationship between the constructs and the elements in the grid. The grid does not say anything about Tom or Harry or any of the other people judged, but rather it is about how the individual construes them, and the structure of the individual's system.

In any single repertory grid the elements chosen represent the areas of research or interest. They need to be a homogenous group (all people or all situations etc.) They need to be relevant to the person completing the grid, or else the grid makes no sense to him or her, and is therefore of little value. If an element has little relevance to the subject, then evaluating it along almost any construct (except comprehensible/incomprehensible) may be difficult, if not meaningless.

When dealing with interpersonal relationships, role names are generally supplied as elements, and those completing the grid are asked to supply the names of people known to them who suitably fill the roles.

In therapy, constructs are supplied by the individual client. There are a number of methods to explore the person's constructs, but they are often taken from either the self-characterisation sketch, or elicited from triads of the elements in the grid. In

the latter case, three of the elements are chosen and the person is asked to say how two of the three are similar. The reply is taken as one pole of the construct, and the person is then asked how the third is different. This is the contrast pole. Further constructs are elicited by choosing different triads of elements. In essence, however, what is really needed is to have pairs of words/phrases which have meaning for the client in connection with the elements in the grid, when one word/phrase means the opposite of the other word/phrase for that person.

This will not always mean the logical opposite. As Ravenette (1977) has illustrated in his work with children, their parents and teachers, the meaning given to one such label may not be the same for the client and the therapist. Ravenette described a case study when a mother talked of her son as 'showing off', which Ravenette understood to mean boasting and drawing attention to himself. However, when asked how the 'showing off' was manifested, the mother described the child's behaviour in terms of expressing anger. When Ravenette asked her about this she explained that she meant the child was angry. This exemplifies the idiosyncratic use of labelling constructs.

It is obvious from this description that, in therapy, the repertory grid keeps closely within the theory of personal constructs i.e. a psychology of individuals. A grid generated in this way is personal to the client.

The use of repertory grids in group research has given rise to difficulties. When groups of subjects are looked at rather than individuals, it is a clear step away from Kelly's original idea of a personal psychology of the individual, and not logically contained within the theory. In practical terms, problems particularly arise in connection with constructs and their elicitation. For instance, if there are ten subjects and ten constructs are elicited from each, it is possible, although perhaps unlikely, that one will be left with 100 different constructs. Analysis of the data to find meaningful relationships between how subjects as a group construe becomes virtually impossible.

To overcome this constructs may be supplied, i.e. the constructs may be those of the therapist/researcher or come from a common pool, rather than be elicited from each subject. In a fundamental way, this use of grids places the technique outside the framework of personal construct psychology. Constructs are personal to the individual, and as Kelly pointed out in his individuality corollary, individuals may have differing construct systems. By supplying constructs, one is no longer using a system personal to the client/subject, and unless carefully selected, the supplied constructs may have little or no meaning to the individuals completing the grid.

Studies quoted by Adams-Webber (1979) which have looked into the issue of using elicited or supplied constructs have indicated a number of important points. Oswalt (1974) found that people tended to use the same very specific words to describe certain specific people on two separate occasions ( $r = .85$ ). This result also supports Hunt (1951), and Fjeld and Landfield (1961) who found considerable consistency in how subjects rated the same people after an interval of two weeks.

Taking this one step further, research by Adams-Webber (1979) suggests that people prefer using their own constructs to those supplied, and may use extreme ratings on their own elicited rather than supplied constructs, suggesting a greater flexibility in their use, which is likely if they are more at home using them.

It needs to be borne in mind, therefore, that despite the ease with which people might use certain common supplied constructs, they may well use completely different constructs given a free choice, which would express their view of the world in their own terms. On the other hand, Warr and Coffman (1970, cited in Adams-Webber) have argued that if supplied constructs are carefully selected in terms of personal meaningfulness, the differences between supplied and elicited constructs may not be great, although this is disputed (Adams-Webber, 1979).

Kelly himself stressed that 'bipolar constructs' (elicited or supplied) are labels rather than the constructs themselves. What the elicited construct implies for the individual, although in



part having a public meaning, may also have specific meaning for that individual as Ravenette (1977) illustrated. Even if all bipolar constructs elicited from ten people were common to all subjects, it would be wrong to assume that these common labels had a common meaning for each of the ten subjects.

In every day life we communicate with words in such a way that some common meaning is implied and shared with others. We use labels of our own and others' choosing when we communicate, and even if we are able to express our views using those words we choose ourselves with greater flexibility, we still use the words of others reasonably well. Even if some degree of variance in the grid will be caused by the subject's possible inability to use a construct meaningfully, it may still be argued that, by providing subjects with pooled constructs which they understand, and which mean something to them, supplying constructs has some value in focusing on a specific area of research. It is, in the end, the use to which the information from the grid is put that will to an extent define its form.

#### 4.4.2 Rationale for using Repertory Grids

Inherent in Personal Construct Psychology is the inter-relation between constructs and behaviour. As Bannister and Mair (1968) point out, Kelly did not see constructs as means of elaborating our understanding of behaviour but rather (p.27):-

"..Behaviour cannot be seen in any meaningful perspective unless the constructs which are being tested by it are appreciated."

In other words, constructs are expressed in behaviour, in that the individual makes predictions about the world and the outcome of his own behaviour, and tests these predictions by acting out or behaving in accordance with his hypothesis. Experience will tell if his hypothesis was useful.

This link between behaviour and constructs fits in with the discussion in the Introduction about the hierarchy of general attitudes which will eventually affect the individual's behaviour to the handicapped or disabled adult or child. The sub-system of constructs which a mother employs to construe mentally

handicapped/educationally subnormal/children with learning difficulties etc. will be individual to her, and be part of her particular hierarchy of general constructs. It is likely to differ from the teacher's construct system. Equally, the mother's constructs of her child may differ from the teacher's. Thus mother and teacher may be making different predictions about the behaviour of a child who is ESN (M) (or Normal), which will intrinsically affect their behaviour towards the child. This, in turn, will affect the child's behaviour and the child's own constructs.

The differing sets of constructs that mothers and teachers employ need not be considered right or wrong. The child's response in the two different situations may well confirm the mother's and teacher's differing predictions. However, it would seem helpful for the continued development of the child if mother and teacher were able to understand and share their respective constructs relating to the child.

The repertory grid has been described as a method of understanding this:-

"..an attempt to stand in other's shoes, to see their world as they see it, to understand their situation, their concerns." (Fransella and Bannister, 1977: p.5)

The use of repertory grid technique therefore seems an appropriate way to try to stand in the shoes of mothers and teachers of ESN (M) children to share their views of the children, and give some meaning to the observations of their interactions with the children.

I have already explained that when grids are used in therapy it has been the standard practice to elicit constructs by various methods already explained, so that the constructs used have a range of convenience for the particular individual completing the grid.

In the present study, grids from mothers and teachers of both ESN (M) and normal children were to be grouped to compare how parents and teachers generally construed ESN (M) and Normal

children in terms of social maturity. It was, therefore, statistically more useful to supply each subject with the same constructs, as this would make comparisons of grids possible. However it is acknowledged, as has been discussed above, that the use of supplied constructs to look at nomothetic results theoretically removes the technique from the parameters of personal construct theory which looks at people individually.

#### 4.4.3 Repertory Grid and Semantic Differential

Repertory Grid Technique (RGT) is superficially very similar to Osgood et al's (1957) Semantic Differential, and it is therefore necessary to explain why RGT was used rather than the semantic differential in the present study.

The semantic differential was originally used to measure the meaning that people attached to words or concepts. In order to do this, subjects were asked to rate a concept on a number of 7-point scales (bipolar adjectives). The scores on all the scales could then be totalled to give the individual's scores on a given concept.

Further, factor analysis of a large number of normative data led Osgood et al. (1957) to extract three major independent factors by which all concepts were judged - evaluative, potency and activity. In the factor analysis 35% of all variation was accounted for by the evaluative factor; 7½% by potency and 7½% by activity.

Bannister and Mair (1968) who have discussed the similarities and differences between RGT and the semantic differential, described the semantic differential as a method to measure:-

"..the cross comparison of meanings of two different words for one subject; or the meanings of the same words for a number of subjects, by enabling the experimenter to sum ratings in terms of the allegedly major dimensions of meaning." (1968: p.124)

Despite their apparent similarity theoretically, and in practice, RGT and the semantic differential differ considerably. Essentially the semantic differential is grounded in learning theory, and RGT in personal construct psychology. However, while the latter is intrinsically part of PCP, Bannister and Mair (1968)

argue that Osgood's grounding of the semantic differential in learning theory is only extremely tenuous.

In practice, there are also a number of ways the two techniques differ. The factor analysis of the normative data from the semantic differential carried out by Osgood et al accounted for only 50 % of the meaning of concepts along the three major dimensions (evaluative, potency and activity) thereby leaving the remaining 50 % of the variation to all other factors. Thus, although Osgood et al stressed that they saw the meaning of concepts as represented in a multi-dimensional space, in practice, the factor analysis reduces this to a normative 3-dimensional space in which individual results are slotted and pushed. Idiosyncratic results and dimensions are ignored. In contrast, RGT allows for a multi-dimensional space created by the dimensions of the individual or groups completing the grid, even when the constructs are supplied. There are no a priori assumptions about normative dimensions in repertory grids.

Osgood's analysis also does not allow for examination of the individual's hierarchical structure between concepts. The idea of hierarchical structure and organisation in each individual's construct system is, however, one of the main corollaries of PCP and analysis can indeed examine these relationships.

In considering the factor analysis of the semantic differential compared to the repertory grid, Bannister and Mair (1968) make two further points. Firstly, the semantic differential ignores what Kelly called the range of convenience (i.e. the range of application/usefulness) of a scale or construct, thereby giving rise to scales which may be inappropriate for judging certain concepts. On the other hand, repertory grids are clearly grounded in personal construct psychology, which stresses the range of convenience of both elements and constructs as integral to the compilation of a grid.

Secondly, Osgood maintained that the general dimensions of evaluation, potency and activity were orthogonal. Bannister and Mair (1968) argue that as people differ in their views, so the independence of these three dimensions may only have occurred in pooled

results. In fact, when the results of a semantic differential completed by stutterers were analysed to look at the factors, Fransella (1965) did not find the three stated independent dimensions. The repertory grid does not make this assumption. Rather the grid seeks to elucidate which constructs form the factors in the component space, and how these factors relate to each other. Although this is particularly true of individual grids, this still hold when grids are pooled.

Finally, as Bannister and Mair (1968) point out, Slater's principal component analysis for grids (1972) which will be discussed briefly below, also accepts the rated semantic differential. As such, the analysis converts the scores of the semantic differential into idiographic dimensions, and in effect analyses the semantic differential material in the form of a grid.

To summarise:-

"Grid method can be cast in such a form as to give all the information that might be derived from the semantic differential, plus additional information which is not obtainable from the normal use of the semantic differential method.

"In grid terms, the semantic differential is concerned with placement of certain specific elements in relation to a number of constructs. Grid method also allows the examination of the elements in the construct space, but in addition, allows the examination of the relationships between constructs in the element space." (Bannister and Mair, 1968; P.134).

#### 4.4.4 Pre-Pilot Trial

Because of the difficulty in getting suitable subjects for the study through schools, piloting work was confined to mothers and playleaders on a playground for handicapped children known to the writer, where children with all handicaps were seen.

In order to see how the grid might be administered one mother of a moderately retarded 11-year old boy was approached and asked to complete a grid.

The mother was asked to supply names of people she knew to fit the ten element role names in the grid. The role names were divided equally between adults and children. A list of 16 bipolar

constructs (Appendix 4.1) was then presented to the mother and she was asked to indicate all those pairs of constructs which had some meaning for her. When this was done she was asked to rate each element along each of the constructs she had chosen on a 1 to 5 scale. The writer filled in the grid as the mother indicated the rating values, but the subject was able to look at the whole grid as it was being completed.

As the aim of this informal pre-pilot was to clarify how to administer the grid, and the form best suited for the present study, this initial grid was not analysed. However, informal discussion with the mother afterwards proved useful in raising a number of points.

- 1) She had not felt easy about rating herself or her husband (who were two of the element roles) when the task had been introduced as a means of seeing how she viewed her son in terms of the constructs supplied.
- 2) There were as many adult roles names as children's names in the list. She indicated she had sometimes found it confusing to rate the elements consistently on any one construct because she used different criteria for adults and children.
- 3) She had had no difficulty in using the supplied constructs she had chosen from the list.
- 4) On the whole she had not found the grid particularly difficult or threatening to complete, and when we looked at the completed grid, she felt that the ratings with regard to her son in comparison to the other people in the grid made sense to her.
- 5) I noted that if there was a tendency for her to rate some people regularly on the negative poles of constructs, she would look back at the grid completed so far and suggest she had better rate that person positively for the next construct, almost irrespective of what it was, as if to be fair.

This informal information was taken into consideration when the following procedure for producing a grid was undertaken.

#### 4.4.5 Compilation of the Grid

##### a) Form and Size of Grid to be used

It was decided that a ten by ten grid with given roles as elements and supplied constructs would be reasonable to administer and be adequate for ascertaining the relevant data.

##### b) Constructs

The aim of the grid was to see if:-

- a) Mothers and teachers would construe the same ESN (M) children differently in terms of social maturity, in the context of other children.
- b) Mothers and teachers would construe the same Normal children in much the same terms of social maturity in comparison to other children.
- c) ESN (M) and Normal children would be construed differently by their mothers; and by their teachers.
- d) There was some relationship between the constructs in the component space of mothers and teachers of ESN (M) and Normal children; and whether and to what extent the four groups differed in their understanding of social maturity, as defined by the grid's constructs.

##### c) Construct Pool

A list of 60 (see Appendix 4.2) words or short phrases was compiled which might be considered as describing people in psychological (rather than physical) terms, some of which might be considered as positively describing a mature adult (e.g. kind, tolerant, responsible), some being negative (stupid, anxious) and some being neutral (conventional). The list was given to 39 men and women (ranging from 20 to 80 years), and included parents of handicapped children, teachers and playleaders of handicapped children. Their instructions were:-

Which of the words/phrases below would you use to describe an adult in terms of social maturity ? Please tick all relevant words."

"Social maturity" was explained further by saying "the kind of behaviour that you would expect of most normal adults as opposed to childish behaviour." It was explained that there were no

right or wrong answers, nor did it matter how few or how many words were ticked. Subjects were also asked to add any other words they felt were relevant to the list.

When the 39 word lists had been collected a count was made of the number of times each word had been chosen. Eighteen adjectives/phrases had clearly been chosen considerably more frequently than any of the others. These 18 words were then taken and put into an implication grid.

#### Implication Grid

The implication grid is a departure from the standard grid already described. Unlike the usual elements in the standard grid, one pole of each construct is used as an element. The implication grid aims to see what each construct means in terms of other constructs, by asking subjects to show what they are also implying when they construe someone as, for example, generous. Hinkle (1965) had devised the grid to examine these relationships between constructs in mathematical terms.

The 18 constructs produced from the word/phrase list, were written on 18 separate cards - one construct printed on a separate card - and laid out before the subject. The subject was then asked to pick up all those cards which they thought would be implied by a particular construct. Their instructions were as follows:

"If someone can be happy alone, which other characteristics are they likely to have at the same time. For instance, would they be likely to be constructive etc.? There are no right or wrong answers, and you can pick up as many or as few cards as you wish."

As the subjects picked up cards, so the constructs implied were recorded on a grid. This procedure was carried out for each construct in turn with each subject separately.

Table 4.12 shows the format of the implication grid, the constructs used and the resultant consensus scores. Eleven subjects completed the implication grid in all.



TABLE 4.12

## COMPLETED GRID OF CONSENSUS IMPLICATIONS FROM 11 SUBJECTS

CONSTRUCTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total
1 Happy alone	11	1	0	0	5	0	1	0	10	2	0	0	1	6	1	0	0	1	39
2 Understanding	0	11	1	2	0	5	7	6	0	2	2	1	9	3	8	2	1	2	62
3 Purposeful	1	0	11	3	9	0	2	0	5	0	2	6	0	0	0	7	0	10	56
4 Responsible	0	2	3	11	3	1	3	0	4	0	9	4	2	3	2	8	0	5	60
5 Makes up own	1	1	8	3	11	0	1	0	8	0	4	6	0	3	2	5	0	8	61
6 Friendly	1	8	0	0	0	11	7	10	0	3	1	1	8	2	7	1	4	1	65
7 Helpful	0	5	0	0	1	4	11	2	0	1	4	7	3	1	3	2	4	3	51
8 Affectionate	0	9	0	0	0	10	3	11	0	2	2	1	8	0	2	0	5	2	55
9 Independent	9	0	4	3	10	1	0	0	11	0	1	3	0	2	2	1	0	3	50
10 Sense of Humour	2	2	0	0	0	6	1	1	0	11	0	0	3	0	4	0	2	2	34
11 Reliable	0	3	1	10	3	2	4	2	1	1	11	3	0	4	2	5	2	3	57
12 Constructive	0	2	7	7	6	0	6	0	4	0	1	11	1	1	1	9	0	11	67
13 Sensitive	0	8	0	0	0	5	6	4	0	0	0	0	11	2	5	0	1	1	43
14 Calm	3	3	1	2	2	0	2	1	4	1	6	2	1	11	7	4	0	1	51
15 Tolerant	1	8	0	1	1	3	4	1	1	2	1	0	6	7	11	3	2	1	53
16 Practical	1	4	6	7	6	1	5	0	3	0	6	8	0	2	1	11	0	5	66
17 Generous	1	3	0	0	0	7	8	6	0	2	1	1	3	0	3	0	11	1	47
18 Positive	1	1	5	8	9	1	2	2	3	0	3	8	1	2	3	7	1	11	68
TOTAL	21	60	36	46	55	46	62	35	43	16	43	51	46	38	53	54	22	60	

When completed, the eleven implication grids were amalgamated into one grid, each cell (Table 4.12) showing the number of times the eleven subjects had ticked it (possible maximum 11). Consideration of Table 4.12 shows that a vertical column for construct no. 1 (Can be happy alone) does not show the same scores as the horizontal row for the same construct etc. Rows indicate what else is implied when a construct is used. Columns indicate when a construct may be implied by other constructs

In order to find those constructs whose implications closely matched, a similarity index was calculated for all possible pairs of constructs rows in the amalgamated grid. The index used was the city block metric transformed to give a "matching score" which runs from 0 (no match) to 100 for a perfect match (Shaw, 1980: p.34). The formula used in this analysis was:-

$$\text{Similarity} = \frac{-100 d_{ij} + 100}{(n-1)c}$$

When:

$d_{ij}$  = the difference score (subtracting ratings for any two constructs and summing the differences regardless of sign).

$n$  = maximum value of the rating scale

$c$  = the number of constructs]

Table 4.13 shows those constructs where there was the highest match.

TABLE 4.13

TOTAL NUMBER OF IMPLICATIONS AND DEGREE OF MATCHING BETWEEN  
 CONSTRUCTS FOR FINAL GRID FORMAT  
 (Only highest matching scores shown)

TOTAL NO. OF IMPLICATIONS (Row + Column)	CONSTRUCT	DEGREE OF MATCH %	CONSTRUCT CHOSEN FOR FINAL GRID
128	Positive-----	83-----85	POSTIVE (Constructive Practical)
122	Understanding-----	87-----	
120	Practical-----	86-----	PRACTICAL (Constructive)
118	Constructive-----	-----	
116	Can make up own mind-----	88-----	CAN MAKE UP OWN MIND (Purposeful)
113	Helpful-----	80	HELPFUL (Generous) FRIENDLY (Affectionate)
111	Friendly-----	89	
106	Responsible-----	86	RESPONSIBLE (Reliable)
106	Tolerant-----	81	
100	Reliable-----	-----	INDEPENDENT (Can be happy alone)
93	Independent-----	82	
92	Purposeful-----	-----	CALM
90	Affectionate-----	-----	
89	Sensitive-----	-----	SENSE OF HUMOUR
89	Calm-----	-----	
69	Generous-----	-----	
60	Can be happy alone-----	-----	
50	Sense of Humour-----	-----	

The first column of Table 4.13 gives the total number of times each construct was ticked by the 11 subjects, both in terms of what it implied (row) and by which other constructs it was implied (column). The constructs are put in order with Positive receiving the greatest number of implications (128) and Sense of humour the least (50). Column three gives the highest matching scores from the analysis, and the lines link those constructs which were closely matched. Where two constructs match, the construct with the greatest number of implications was the construct chosen for the final grid. This is the entry in BLOCK CAPITALS in column 4 with those constructs which matched it mostly closely in brackets below. As has already been discussed, those constructs with wider implications are likely to be more superordinate than those with fewer implications, and have a wider range of convenience. It was, therefore, assumed that the constructs finally selected would have the widest range of convenience of all constructs in the original list reflecting aspects of social maturity.

The negative pole was a logical opposite of the positive pole, and as will be seen in the final format of the grid (Appendix 4.3) in eight of the 10 cases the negative pole was the exact reverse of the positive pole (e.g. Friendly/Unfriendly; Independent/Dependent). For Calm it was felt that Anxious was the most appropriate; for Understanding (which was qualified as sensitive) Insensitive was chosen.

e) Elements

The ten role names for the elements included eight role names for children and two for adults. It was hoped that the inclusion of two adults in the designated roles (close personal friend/ liked adult and disliked adult) would indicate which pole in each of the 10 constructs the mother/teacher particularly liked/disliked. It was assumed that both the mother and teacher would encourage or discourage the preferred and non-preferred poles respectively in the child.

The eight roles for the children were:-

- 1) Target child (ESN (M) or Normal).
- 2) Normal child: a child of about the same age as the target child who was at an ordinary rather than a special school.
- 3) Older child.
- 4) Younger child.
- 5) Dare Devil/Adventurous child: A child who was considered naughty but-essentially pleasant.
- 6) Good child: A child who was considered obedient and amenable.
- 7) Problem/naughty child: A child who differed from the dare devil child in that his behaviour would give rise to considerable concern.
- 8) Mature child: The type of child who would be form monitor, particularly grown up and responsible for his age.

There were a few occasions when either the mother or teacher were unable to give the name of a child or adult for one of the roles. On these occasions, it was suggested:-

- 1) They think of a TV character who would fill the role.
- 2) Or, they imagine the type of child/adult who would fit into that role.

This procedure easily generated the required name.

#### f) Rating Scale

There are various ways of completing grids, including the tick-and-cross method (appropriate or inappropriate); rank ordering the elements along each construct; and rating elements on 1-3, 1-5, or 1-7 etc.

As already mentioned, Kelly (1955) assumed that people would apportion an approximately equal number of elements to each pole of a construct, However, in the tick-and-cross method particularly, there is often a tendency to place the majority of people on the preferred pole of the construct (Adams-Webber, 1979) producing lopsidedness. Rank ordering elements is a way of overcoming this problem. Subjects are asked to put each of the elements in order between the two poles of the construct. However, as it is not possible to tie elements this can cause severe

restraints on the subject. A second criticism of this method, is that one cannot assume that the rankings are evenly spaced along the construct, so there may still, in effect, be lopsidedness

In order to get over the first criticism - constraining the subject to rank order - the use of rating scales is seen as giving more flexibility to subjects, as rating scales can include ties. At the same time, it means the degree of definition even on a 5- or 7-point scale is less exact than on a rank-ordered grid. In addition, one is still left with the problem of whether the intervals of the rating scales as used by subjects are equivalent to mathematical intervals, a problem true of all rating scales. Although no assumption can be made of the intervals in rating scales (which is also true of rank-ordering techniques) it was felt that the greater flexibility with which subjects could use rating scales rather than rank-order methods made rating scales preferable in this study.

#### 4.4.6 Procedure

The repertory grid was administered after the mother or teacher had been observed with the child, and after they had completed the questionnaire. The time taken to complete the grid varied from 15 to 60 minutes depending on the interest expressed and mothers' and teachers' understanding of the procedure. There appeared to be no consistent trends as to who took longer than others. In only one instance did a subject find any apparent difficulty in completing the grid and in this case the exercise was abandoned after 20 minutes as it was clear that the subject was unable to tackle the task.

Subjects were first asked to supply the names for each of the 10 role names. The names were written on ten separate cards. These were placed in a row on a table in front of the subject who was then given 5 piles of 10 cards each, a pile each for numbers, 1, 2, 3, 4, and 5. Each pole of a construct was written on a separate card and these two cards were then placed at either side of the table. The subject was asked to rate each individual along the construct using the numbered cards in the piles. For the first construct, subjects were instructed:-

"Can you allot a mark from 1 to 5 for each of the people on the cards to show how well you think they can make up their own minds?"

No. 1 means they are very good at making up their mind.

No. 2 means they can make up their minds most of the time.

No. 3 means:-

a) You don't know.

b) They are in the middle of the scale.

c) You never think of them that way.

No. 4 means they can only make up their mind very occasionally.

No. 5 means they can never make up their mind.

Please use the same scale when judging the children and the adults. There are no right or wrong answers, and you can use as many of the same numbers as you like."

Subjects were asked if they understood the instructions, and if the construct meant something to them. This procedure was repeated for each construct. The researcher filled in the score after each construct was rated and resorted the cards. The subject was not able to see the grid as it was being completed. After the procedure was completed, they were able to look at the completed grid and to discuss this if they wished.

If subjects needed some further clarification about a construct they were given the following explanations:-

- a) Can make up own mind: People who know what they want. People who are decisive.
- b) Friendly: People who are affectionate.
- c) Helpful: (Subjects did not need clarification).
- d) Responsible: People whom you can rely on, whom you can trust.
- e) Independent: People who can look after themselves if necessary, or who do not necessarily follow the herd.
- f) Calm: As opposed to those who worry a lot and panic at the slightest upset.
- g) Sense of Humour: People who can laugh at themselves, do not take themselves too seriously, and who can laugh and joke.
- h) Positive: People who may be optimistic and ready to take up opportunities offered to them.

- i) Understanding: People who are sensitive and tolerant.
- j) Practical: People who are practical in their approach to life. (see Appendix 4.3 for final grid).

#### 4.4.7 Analysis

Grids were analysed using INGRID, SERIES and DELTA programs (Slater, 1977).

##### a) INGRID

The principal component analysis of the INGRID program produces figures from which the multi-dimensional component space created by the constructs and the elements, and all possible relationships between constructs and elements can be viewed. Only selected results from the analysis will be discussed in this study. These are:-

- a) The Structure of the Component Space derived from the rating scales in the grid.

The extent to which each construct contributed to the total variation in the grid.

The correlation between constructs.

- b) The relationship of the component space to the elements. The correlations between the constructs and the Target child (ESN (M) or Normal).

The extent to which element contributed to the total variation in the grid.

The distance between the ESN (M) child and the other elements.

In the main results the INGRID program analysed 4 consensus grids (to be discussed), but in the pilot, the program analysed two individual grids.

##### b) SERIES

The SERIES program accepts a series of grids with similar constructs and element role names to produce a single consensus (or average) grid which can then be analysed by the INGRID and DELTA programs. This program was used only in the main study, and not in the pilot.



3) DELTA

The DELTA program is a means by which two grids with the same format, constructs and element role names can be compared. A principal component analysis is run to analyse the differences between the two grids. Only a selected number of results from the analysis will be discussed in this study. These are:-

- a) The difference in the Component Space derived from a pair of consensus grids with regard to the constructs.  
The general degree of correlation between each grid.  
The correlations between the constructs.
- b) A comparison of the way target children are construed in two consensus grids.  
The percentage of the total difference to which target children contributed in the two grids.

Some of the advantages of using this package as compared to other computer programs or manual methods are as follows:-

- 1) As it had been anticipated that over 100 grids would have to be analysed, it was felt that computer rather than manual analysis would save considerable time.
- 2) Of some of the major programs available at the onset of the research, e.g. Focus (Thomas and Shaw, 1978) and S.P.S.S. Factor Analysis (PA1 and PA2) (Nie, Hull, Jenkins, Steinbrenner and Bert, 1975), both the Focus and INGRID packages provided means of analysing individual and a set of grids. However, in addition, INGRID's derivative programme, DELTA (Slater, 1968), appears to have no equivalent in the Focus cluster analysis package of Shaw and Thomas (1978).
- 3) The INGRID program also provides a richer analysis of data than the Focus program, and allows one to look at the overall picture of the data obtained from a grid, while the cluster analysis of Focus only highlights various groupings of elements.

#### 4.4.8 Pilot Study

The mother and playleader of a moderate to severely mentally handicapped boy of 15 years completed the finalised repertory grid. It was hoped that the final form of the grid would:-

- a) Be easy and non-threatening to administer.
- b) Have some meaning for both the mother and playleader when completed.
- c) Indicate if and on which of the constructs used the handicapped child would be seen differently from the other children in the grid.

The two grids were analysed separately by using the INGRID program and then compared using the DELTA program.

##### a) Administration of the Grid

Both the mother and playleader found the grid easy to complete using the procedure described above, and indicated that they did not feel constrained or threatened by the procedure. Both expressed considerable interest and some enjoyment in completing the grid (an opinion which was expressed by many mothers and teachers throughout the study.)

Once completed, the finished grid was shown to the subject and we looked at its face validity. Again, both mother and playleader said that the apparent correlations and inferences from looking at the raw data had some meaning for them, and did not come as a complete surprise.

The main purpose of this pilot grid was to see if the handicapped child would be readily identifiable from the other elements (children and adults).

The results showed that the grid in its present format indicated that a deviant child (both the handicapped and problem children) would be seen as isolated from other children in the way a mother and a playleader perceived him. Although the children in the main study are ESN (M) rather than ESN (S) as the child in the pilot study, it was felt that the grid format had proved to be a useful tool in its present form in seeing how mothers and teachers perceived retarded children.

Summary of Methodology

The mothers and teachers of 19 ESN (M) and 18 Normal children from seven inner London schools were observed at home and in the classroom respectively with the individual target children. In addition, mothers and teachers completed a verbally administered questionnaire which focused on specific social and independence skills of these children. Finally, mothers and teachers completed a repertory grid to assess the frames of reference they used when they judged ESN (M) or NORMAL children as socially mature.

5.

OBSERVATION RESULTS

One hour of observations was recorded both at home and at school for 19 ESN (M) and 18 normal children, making 37 hours of home observations and 37 hours of school observations, totalling 74 hours in all. Frequencies for each sub-category of behaviour recorded were analysed. A record was made if a behaviour sub-category occurred once during a minute. The maximum frequency of any sub-category was, therefore, 60.

5.1 Behaviour Categories

There were four major categories of behaviour: Adult Verbal; Adult Non-Verbal; Child Verbal; and Child Non-verbal. Each of these four major categories comprised five sub-categories: Control; Care; Initiation/Approach; Acceptance; and Rejection. (See Methodology: Observations for detailed description.)

In order to give the reader a sense of the quality of the interactions six extracts from the observation data are given (three from Home Observations; and three from School Observations). In addition, the coding category of each interaction is also given. Two points should be borne in mind. Firstly, some behaviours were recorded which were not coded, but gave an idea of what else was happening in the home or classroom. Secondly, if a sub-category of behaviour was recorded twice in a minute (the length of the behaviour unit) occurrence was only counted once in that minute. The extracts are typical of the types of behaviour recorded both at home and at school. All names are fictitious.

5.1.1 Home Observationsa) Child 04 (Age 14.0 years)

(Mary had come home from school and she and her mother were watching television while they chatted.)

<u>Time</u>	<u>Coding Category</u>	<u>Observed Behaviour</u>
4.26		Mary watches the television.
		Canary bursts into song.
4.27		Mary talks to the Canary.
	Adult V Care )	Mother and Mary talk about Mary's

Child V Care )	knitting.
Child V Control	Mary tells mother to undo all the knitting and she will have to start it again.
Adult V Care )	Mother and Mary discuss the knitting
Child V Care )	further.
4.28 Child V Care	Mary says her father will get a card for her.
Adult V Control	Mother tells Mary she will have to get it herself.
Child NV Resist.	Mary looks at the television and does not reply.
Adult NV Accept.	Mother begins to undo the knitting.
Adult V Control	Mother tells Mary to get the scissors.
Child NV Accept.	Mary gets up and gets the sewing box.
Adult NV Accept.	Mother takes the box and finds the scissors.

A number of observations of home interactions were similar to this with children and their parents talking intermittently while they watched the television.

b) Child 14 (Age 13.0 years)

(Mother and John had been arguing earlier.)

<u>Time</u>	<u>Coding Category</u>	<u>Observed Behaviour</u>
5.12	Child NV Approach	John comes downstairs and enters the kitchen where his mother is cooking.
	Adult V Resist.	Mother says he's being a silly boy.
	Child V Approach	John asks if he can go out to play.
	Adult V Resist.	Mother says 'No'.
5.13	Child V Approach	John asks again.
	Adult NV Control	Mother slaps him.
	Child V Care	John explains why he wants to go out.
	Adult V Care	Mother explains why he cannot.
	Child V Approach	John again asks if he can go out.
	Adult NV Resist.	Mother does not reply.

This interaction was typical of behaviour recorded between mother and son in this dyad, although atypical of the general behaviour recorded in children's homes. However, it is a good example of what might be termed negative or unproductive communication which was occasionally recorded.

c) Child 15 (Age 15.1 years)

(Mother, Susan and Sharon (Susan's sister) had just returned from shopping.) (Susan is the target child.)

<u>Time</u>	<u>Coding Category</u>	<u>Observed Behaviour</u>
5.40		Mother is preparing food in the kitchen.
5.41	Child NV Approach	Susan enters the kitchen with Sharon holding a kitten.
	Adult V Control	Mothers tells Susan to put the kitten outside.
	Child V Resist. ) Child NV Resist.)	Susan says 'No' and puts it down on the floor.
	Adult V Control	Mother tells Susan to feed the cat.
	Child NV Accept.	Susan gets out the cat food.
	Adult V Care )	
	Child V Care )	Mother and Susan chat and laugh with Sharon about the kitten.
	Adult NV Care )	
	Child NV Care )	
	Adult V Care	Mothers watches Susan feed the cat.

Apart from watching television together, much of the behaviour recorded at home tended to centre around various domestic chores, particularly cooking supper or tea which generally occurred during the time when observations were made.

5.1.2 School Observationsa) Child 14 (13.0 years)

(17 children in the class, and one teacher with a teaching assistant. The teacher had been explaining about the school holiday.)

<u>Time</u>	<u>Coding Category</u>	<u>Observed Behaviour</u>
9.56	Child NV Accept.	John watches teacher explaining.
	Adult V Care	Teacher explains about letters to be taken home containing their reports.
	Child NV Care	John smiles at teacher.
	Child NV Resist.	John turns round and watches another boy in the class.
9.57	Adult V Care	Teacher continuing to explain about

	parent/teacher meeting.
Child NV Care	John smiles and nods.
Child NV Accept.	
	Various children comment and ask questions to which teacher replies.
Child NV Resist.	John looks round class and out of window.
9.58 Adult V Control	Teacher tells children they are not to open their reports.
Child NV Resist.	John continues to look round class or out of window.
Adult V Care	Teacher explains about bad reports.

There tended to be three styles of teaching. As illustrated here, the teacher taught from the front of the class, occasionally asking general questions but more often telling the children what to do, with the children remaining fairly passive. This meant a child might go off-task (NV rejection) by looking round the room, talking quietly to other children, without always being noticed.

b) Child 18 (12.8 years)

(There were 12 children in the classroom, with one teacher and no teaching assistant. The teacher had been teaching from the board. Now the children were working on their own and went to the teacher as and when they needed help.)

<u>Time</u>	<u>Coding Category</u>	<u>Observed Behaviour</u>
10.14		Teacher goes to help another child.
	Child NV Accept.	Fiona writes in her book.
		Teacher goes to the board.
	Child NV Approach	Fiona gets up and goes to the teacher.
		Teacher helping Sarah.
	Adult NV Accept.	Teacher takes Fiona's book and looks at her work.
	Adult NV Care	Teacher marks Fiona's work.
	Adult V Care	Teacher praises Fiona for her work.
	Child V Accept.	Fiona grunts.
10.15	Teacher V Care	Teacher explains to Fiona.
	Child NV Accept.	Fiona nods.
		Teacher calls out to Anthony who is

	making a noise.
Child NV Accept.	Fiona looks at her book.
Child NV Approach	Fiona laughs at a piece of paper on desk.
Adult V Control	Teacher tells Fiona to put the paper back.
Child NV Accept.	Fiona returns the paper.
Adult V Approach	Teacher asks Fiona a question about her work.
Adult V Care	Teacher prompts her.
Child V Accept.	Fiona answers.
10.16 Adult V Care	Teacher praises Fiona.

Here a second style of teaching is shown. The teacher occasionally taught from the board, but once he had set a task, had the children approach him for specific help or he would go to them on a regular basis, or if called.

c) Child 25 (14.0 years)

(There were 10 children in the class, one teacher but no teaching assistant. The teacher had been handing around books at the beginning of the class.)

<u>Time</u>	<u>Coding Categories</u>	<u>Observed Behaviour</u>
11.03	Adult V Care	Teacher asks Lance if he can see.
	Child V Accept.	Lance says he's OK.
	Adult V Care	Teacher teaches by explaining.
	Child NV Accept.	Lance watches teacher.
	Adult V Control	Teacher tells class what he wants them to do.
11.04	Child NV Accept.	Lance opens his desk, gets out a book and begins to write.
	Adult NV Control	Teacher writes instructions on the board
	Adult V Care	and explains what the work is about.
	Adult V Approach	Teacher asks a general question.
		Various children answer (not Lance).
	Child NV Accept.	Lance continues to watch teacher.
	Child NV Resist.	Lance looks round and stares out of the window.

The third method of teaching appeared to be with the teacher teaching from the front of the class, but engaging the children to participate more actively by asking questions and encouraging class discussion.



## 5.2 ANALYSES

The following analyses were carried out.

### 1) Pearson Correlation Coefficients on:-

- a) Sub-categories of behaviour by class size (SCHOOL) for both the ESN (M) and Normal groups.
- b) Sub-categories of behaviour by number of minutes mother and child were physically in the same room (HOME), for both the ESN (M) and contrast groups.
- c) Sub-categories of behaviour by sub-categories of behaviour (ESN (M) GROUP).
- d) Sub-categories of behaviour by sub-categories of behaviour (NORMAL GROUP).

### 2) Analysis of Variance

The frequency of each behaviour sub-category was analysed against each of the variables listed below. In addition, all sub-categories were transformed into proportions of their major category i.e. Adult Verbal Control was transformed into a proportion of Adult Verbal Behaviour. These scores will be referred to as PROPORTIONAL scores.

ANOVA was applied to all frequencies and proportional scores for each sub-category as follows:

- a) Each sub-category by GROUP (ESN (M) or Normal group) by LOCATION (Home or School).

#### b) Home Observations

Each Sub-Category by GROUP by

CHILD'S SEX (girl or boy).

CHILD'S AGE (above or below 13 years 6 months).

CHILD'S CLASS (middle or Working class).

#### c) School Observations

Each Sub-category by GROUP by

CHILD'S SEX.

CHILD'S AGE.

CHILD'S CLASS.

TEACHER'S SEX (female or male).

### 5.3 CORRELATIONS

#### 5.3.1 Class Size

Table 5.01 shows that there was a significant negative correlation between the class size and how often the teacher told ESN (M) children what to do (verbal control) ( $r=-.62$ ;  $P<0.01$ ), talked to and taught them (verbal care) ( $r=-.51$ ;  $P<0.01$ ), asked them questions (verbal initiation) ( $r=-.57$ ;  $P<0.01$ ) and answered the children's questions (verbal acceptance) ( $r=-.56$ ;  $P<0.01$ ). Similar negative correlations were found between the frequency of teachers keeping an eye on (non-verbal care) ( $r=-.57$ ;  $P<0.01$ ). So in the classes with more children teachers gave ESN (M) children less attention generally.

For the contrast group of children in a normal schools there were no significant correlations between class size and the teacher's verbal or non-verbal behaviour. The difference in pattern may be accounted for by the fact that a behaviour was coded if the teacher directed it towards either the target child (ESN (M) or Normal) specifically, or to the class in general to include the target child. In the classrooms in normal schools there was more of the latter type of behaviour, so that, as the results indicate, class size did not affect how much behaviour the teacher directed towards the child although this was sometimes of a general rather than a specific nature.

TABLE 5.1

PEARSON CORRELATION COEFFICIENTS BETWEEN CLASS SIZE AND BEHAVIOUR  
SUB-CATEGORIES FOR ESN (M) CHILDREN IN SCHOOL

	Control	Care	Initiation	Acceptance	Resistance
Adult Verbal	-.62**	-.51*	-.57**	-.56*	-.38
Adult Non-Verb.	-.30	-.57**	-.39	-.36	-.18
Child Verbal	-.37	-.33	-.38	-.66**	-.42
Child Non-Verb.	.11	.07	.23	.24	.42
* P <0.05					
** P <0.01					

There was a significant negative correlation between class size and the frequency of ESN (M) children responding (child verbal acceptance) ( $r=-.66$ ;  $P<0.01$ ) to the teacher. There were no significant correlations between class size and any sub-category of child behaviour in the Normal group of children.

In order to consider the importance of class size in greater detail the ESN (M) group of children were divided into two groups, those in classes of 5 to 11 children, and those in classes of 12 to 19. This division was made at this point as the mean class size was 11.1, and 9 children were in smaller and 10 in larger classes. In view of the above results, it was predicted that as class size increased so teachers' verbal and non-verbal behaviour towards the children would decrease as would the children's verbal behaviour towards the teacher. These hypotheses were only partially confirmed (Table 5.02).

TABLE 5.2

CORRELATIONS BETWEEN CLASS SIZES (larger and smaller) AND  
BEHAVIOUR SUB-CATEGORIES FOR ESN (M) CHILDREN IN SCHOOL

SMALLER CLASS (N=10)	Control	Care	Initiation	Acceptance	Resist- ance
Adult Verbal	-.64*	-.48	-.73**	-.61*	-.42
Adult Non-Verb.	-.05	-.29	-.33	-.33	-.23
Child Verbal	-.45	-.44	-.33	-.63*	-.58*
Child Non-Verb.	N/A	-.16	-.29	-.01	.31
LARGER CLASS (N=9)	Control	Care	Initiation	Acceptance	Resist- ance
Adult Verbal	-.45	-.23	-.17	-.13	-.33
Adult Non-Verb.	-.50	-.47	-.32	-.52	-.32
Child Verbal	N/A	-.24	0	-.31	-.32
Child Non-Verb.	-.13	-.12	.31	.23	.14
* P <0.05					
** P <0.01					

It will be seen that in the larger classes (12 to 19 children) there was no relation between class size and any of the teacher or child behavioural sub-categories. In the smaller classes, there were five correlations. As the size of the class increased from 5 to 11 children so teachers controlled individual children less often ( $r=-.64$ ;  $P<0.05$ ), asked them less questions ( $r=-.73$ ;  $P<0.01$ ), and answered the children's questions or agreed with what the children said less often ( $r=-.61$ ;  $P<0.05$ ). As the class size increased so ESN (M) children not only agreed with their teachers or answered their questions less often ( $r=-.63$ ;  $P<0.05$ ), but also resisted what teachers said or disagreed with them less often ( $r=-.58$ ;  $P<0.05$ ). There were no other significant results.

Perhaps the most striking feature of these three tables is the relation between class size and the teachers' verbal behaviour in the smallest classes, as well as the children's verbal response to teachers in these classes. The fact that teachers' verbal and non-verbal care and non-verbal approach did not correlate with increasing class size in either the smaller or larger group although they did in the combined group, may be related to the reduction in numbers in the sample created bifurcating the data.

It might well be useful to look into this factor in more detail with larger samples to find the optimal class size for ESN (M) children.

### 5.3.2 Length of Time with Mother

It had been stipulated that although mothers and children should be in the home throughout the observation period, in order to record as natural interactions as possible it was not necessary that they remain in the same room all the time. Because of this, all sub-categories of behaviour were correlated with the number of minutes in the hour's observation period that mothers and children were actually together.

In the case of ESN (M) children there was no significant correlation between the amount of time together, and the frequency of any behaviour sub-categories.

Table 5.3 below shows that this was not the case for Normal children. Here there were a few significant positive correlations.

TABLE 5.3  
PEARSON CORRELATION COEFFICIENTS OF THE NUMBER OF MINUTES MOTHERS AND CHILDREN WERE TOGETHER AND ALL BEHAVIOUR SUB-CATEGORIES

	Control	Care	Initiation	Acceptance	Resist.
Adult Verbal	.19	.55*	.40	.29	.13
Adult Non-Verb.	.22	.53*	.40	.21	.31
Child Verbal	.21	.43	.33	.33	.33
Child Non-Verb.	.25	.49*	-.08	.39	.16
* P <0.05 (two-tail) N=18					

The number of minutes the mother and child were together positively correlated with how much the mother chatted ( $r=.55$ ;  $P<0.05$ ) and how much smiling and affection (non-verbal care) she displayed towards the child ( $r=.53$ ;  $P<0.05$ ). Similarly, the frequency of children's smiling and laughter with their mothers increased as their time together increased ( $r=.49$ ;  $P<0.05$ ).

### 5.3.3 Correlations between all Behaviour Sub-Categories

Correlations were carried out between all behaviour sub-categories both for the ESN (M) and Normal children, at home and at school. These will be found in full in Appendices 5.1 to 5.10. A few selected results will be discussed here.

#### a) Children's Verbal Behaviour

Appendix 5.1 Table a) shows correlations between all sub-categories of the ESN (M) children's verbal behaviour at home and at school. All sub-categories of verbal behaviour at school correlate with each other, and all but one pair (asking questions with verbal resistance) do so significantly. At home asking questions correlates significantly with chatting ( $r=.70$ ;  $P<0.01$ ), and with verbal resistance ( $r=.46$ ;  $P<0.05$ ), but there are no other significant correlations.

However, there were no significant correlations between any sub-category of ESN (M) children's verbal behaviour at home and their verbal behaviour at school. The importance of this finding is that it indicates it would not be possible from school observations of ESN (M) children's verbal behaviour to predict the frequency of any sub-category of verbal behaviour displayed by the child at home.

[This seems to accord with the fact that there was very little correlation between the kind of verbal environment ESN (M) children experienced at home and at school, in terms of the sub-categories (Appendix 5.2 Table a). Those children whose mothers agreed with them or answered their questions, had teachers who also answered their questions ( $r=.48$ ;  $P<0.05$ ). At the same time children whose mothers asked them questions, were less likely to be praised or chatted to by their teachers ( $r=-.46$ ;  $P<0.05$ ).]

For Normal children there were a number of positive correlations between home sub-categories of verbal behaviour; and between school sub-categories of verbal behaviour (Appendix 5.1 Table b). With regard to correlations between verbal behaviour displayed at home and at school, with two exceptions, the results are similar to those for ESN (M) children. In the Normal group, it appears that children who told their mothers what to do (child verbal

control), were likely to ask for more attention (child verbal initiation) at school ( $r = .68$ ;  $P < 0.01$ ). Children who asked their mothers questions, also tended to reply to teachers questions (child verbal acceptance) in the classroom ( $r = .54$ ;  $P < 0.05$ ).

[As with ESN (M) children, the verbal environment Normal children experienced at home very rarely correlated with the verbal environment they experienced at school (Appendix 5.2 Table b)].

#### b) Children's Non-Verbal Behaviour

For children's non-verbal behaviour at home only one subcategory correlated for the ESN (M) children (Appendix 5.3 Table a). Children who approached their mothers were very likely to listen to what their mothers were saying and do as they were told ( $r = .57$ ;  $P < 0.01$ ). There were no correlations between any sub-categories of non-verbal behaviour displayed by ESN (M) children at school. Correlations between home and school non-verbal behaviour for ESN (M) children were not significant except in one case. Children who smiled, laughed and showed concern to their mothers were very likely to show similar behaviour towards their teachers ( $r = .55$ ;  $P < 0.05$ ).

[Their experience of non-verbal behaviour (Appendix 5.4, Table a) from their mothers and teachers did not correlate, except that those who were ignored by their mothers tended to be non-verbally controlled and at the same time listened to by their teachers ( $r = .62$ ;  $P < 0.01$  for both results).]

Appendix 5.3 Table b) gives the results for Normal children. No sub-categories of non-verbal behaviour correlated in the home observations. Non-verbal behaviour displayed at school correlated only once. Children who worked tended go off task less ( $r = -.53$ ;  $P < 0.05$ ), which is perhaps not altogether surprising. There were no correlations between their non-verbal behaviour at school at home. Non-verbal behaviour from mothers and teachers did not correlate at all (Appendix 5.4 Table b).

### Summary

Perhaps the most noticeable factor in looking at the above correlations between children's behaviour at home and at school is the general lack of correlations. [This may not be altogether surprising when one considers that the verbal environment children experienced at home and at school rarely correlated.] In some cases the low number of correlations was such that those that were significant could have occurred by chance. This was particularly the case for ESN (M) and Normal children's non-verbal behaviour, and for the Normal children's experience of non-verbal behaviour.

ESN (M) children who were social in a non-verbal way, e.g. smiled, laughed and showed concern for mothers were very likely to be like this at school. Normal children who discussed and chatted with mothers did so with teachers; and on the rare occasions they told their mothers what to do, this indicated the likelihood of their asking questions at school. However, in no other way could the teacher predict how a child might behave at home, nor a mother predict how a child might behave at school.

#### 5.3.4 Adult-Child Interactions

##### a) Adult Verbal with Child Verbal

Appendix 5.5 gives the correlations between all categories of adult verbal and child verbal behaviour at home and at school for ESN (M) and Normal children.

At home child verbal control did not correlate significantly with any of the mothers' verbal behaviour, but there was a significant correlation between children asking questions and all sub-categories of mothers' verbal behaviour. Children who resisted what their mothers said tended to be told what to do ( $r=.68$ ;  $P<0.01$ ), be agreed with ( $r=.57$ ;  $P<0.05$ ) or disagreed with ( $r=.75$ ;  $P<0.01$ ). Perhaps, more interestingly, those who chatted a good deal to their mothers were told what to do ( $r=.62$ ;  $P<0.01$ ), agreed with ( $r=.52$ ;  $P<0.05$ ), or disagreed with ( $r=.68$ ;  $P<0.01$ ), but there was no relation between the amount of chatting to their mothers, and the amount their mothers chatted to them ( $r=.03$ ; NS).

At school, all but two sub-categories of teacher-child verbal interactions were significantly positively correlated for ESN (M)



children. Both verbal resistance and control expressed by children did not relate to teachers giving praise, information or general chatter ( $r=.29$  and  $.43$  respectively).

For Normal children at home, a number of subcategories of mother and child verbal behaviour correlated significantly (Appendix 5.5) The pattern was not identical to that for ESN (M) children, particularly the fact that children's verbal care (e.g. chatter etc.) significantly correlated with mothers' chatter ( $r=.83$ ;  $P<0.01$ ), quite different from the ESN (M) dyads.

Teacher-child verbal interactions at normal schools showed fewer correlations for Normal than for ESN (M) children. Children telling teachers what to do was not observed on a single occasion for any child in a normal school. The more the teachers told children off or disagreed with them the more they asked questions, or agreed or disagreed with teachers. Or put differently, telling children off or contradicting them did not relate to reduction in the verbalisations in the classroom in normal schools.

b) Adult Verbal with Child Non-Verbal

For ESN (M) children (Appendix 5.6) there were no significant correlations between sub-categories of the mothers' verbal behaviour and sub-categories of the children's non-verbal behaviour at home. In other words looking at the frequencies of mothers' verbal behaviour to ESN (M) children there was no way one could predict the frequencies of non-verbal behaviour the children would display.

There were only two significant correlations between subcategories of behaviour for ESN (M) children at school. In both cases, children who were less likely to go off task had teachers who either taught them, gave them praise and encouragement (verbal care) ( $r = -.56$ :  $P<0.05$ ), or asked them questions ( $r = -.47$ :  $P<0.05$ ). However, there was no correlation between praise or questioning from teachers, and the amount of work or attendance to what the teacher was saying, displayed by the children.

In the Normal classrooms (Appendix 5.6), the pattern was not the same. At home 3 out of a possible 25 correlations were signifi-

cant. Mothers' chatter positively correlated with children laughing and showing concern ( $r = .68$ :  $P < 0.01$ ) - this had not been the case for ESN (M) children. Children who tried to get their mothers' attention had mothers who were likely to resist or disagree with their children more frequently ( $r = .58$ :  $P < 0.05$ ). Children who tended to do as they were told had mothers who told them what to do ( $r = .84$ :  $P < 0.01$ ) and made requests ( $r = .65$ :  $P < 0.01$ ). This had not been found with ESN (M) children.

For Normal children at school there were three significant correlations. Children who tried to get their teachers' attention (non-verbal initiation) had teachers who tended to tell the children what to do ( $r = .53$ :  $P < 0.05$ ), and ask the children questions ( $r = .50$ :  $P < 0.05$ ). Perhaps the most interesting result is that teachers' response to the children's behaviour negatively correlated with children getting on with their work ( $r = -.50$ :  $P < 0.05$ ), i.e. agreeing with or responding to children's requests etc. did not correlate with children working more or attending.

#### c) Adult Non-Verbal and Child Verbal

For ESN (M) children at home there were two significant correlations which were both positive. Mothers doing as their children directed (non-verbal acceptance) correlated with children telling mothers what to do ( $r = .48$ :  $p < 0.05$ ). Mothers who tried to manipulate their children non-verbally (non-verbal control) had children who tended to resist them and refuse to comply ( $r = .46$ :  $p < 0.05$ ) (Appendix 5.7).

At school all sub-categories of teacher non-verbal and child verbal behaviour correlated positively, the majority significantly. Of particular interest is that in classrooms where teachers were writing instructions on the board (non-verbal control) children also tended to talk and chatter more ( $r = .61$ :  $p < 0.01$ ), to ask more questions ( $r = .55$ :  $p < 0.01$ ) and to agree with the teacher more frequently ( $r = .63$ :  $p < 0.01$ ). Teachers approach to ESN (M) children positively correlated at significant levels with children asking questions ( $r = .59$ :  $p < 0.01$ ) and children agreeing with their teachers ( $r = .45$ :  $p < 0.05$ ). At the same time, where the teachers increasingly ignored the children, these behaviours were

also increasingly displayed by the children (Care:  $r = .46$ :  $p < 0.05$ ; Initiation:  $r = .57$ :  $p < 0.01$ ).

Appendix 5.7 illustrates correlations for the Normal children and adults. At home mothers' non-verbal control correlated positively with children refusing to comply ( $r = .54$ :  $p < 0.05$ ). This last correlation, common to both ESN (M) and Normal children suggests that either children are well aware of when mothers are trying to control them more subtly, and will state their non-compliance, or that mothers use more subtle means of control when they know their children are fairly vocal in disagreement. Children chattering to their mothers correlated with mothers smiling, laughing and showing concern ( $r = .79$ :  $p < 0.01$ ), which was not the case with the ESN (M) group.

At school, where teachers responded to children's questions or demands, children were likely to chatter ( $r = .59$ :  $p < 0.01$ ), ask questions ( $r = .57$ :  $p < 0.01$ ), and agree with their teachers ( $r = .63$ :  $p < 0.01$ ). At the same time, where children agreed with their teacher more frequently, teachers increasingly ignored them ( $r = .78$ :  $p < 0.01$ ).

#### d) Adult Non-Verbal and Child Non-Verbal

For ESN (M) children at home, there were three highly significant positive correlations ( $p < 0.01$ ) (Appendix 5.8). There was a high positive correlation between mothers' and children's smiling, laughing and showing concern ( $r = .89$ ), i.e. if one smiled the other smiled. Mothers approaching ( $r = .68$ ) or controlling ( $r = .77$ ) their children non-verbally correlated with children increasingly tending to ignore them; but mothers' ignoring their children less related to children responding to what they were told to do.

Appendix 5.6 also illustrates that at school there were only three significant correlations, all of which were negative. Teachers' approach to ESN (M) children ( $r = .51$ :  $p < 0.05$ ) and response to their demands or requests ( $r = .57$ :  $p < 0.01$ ) related to children going off task less frequently. These results are perhaps not surprising. However, of some interest is that there was a relationship between an increase in smiling at children by teachers

and a decrease in smiling at teachers by children ( $r = -.45$ :  $p < 0.05$ ).

Finally, this table gives the results for Normal children. At home children's and mothers' smiling and showing concern correlated positively ( $r = .63$ :  $p < 0.01$ ). Children's approach to their mothers related to mothers' responsiveness to their children ( $r = .47$ :  $p < 0.05$ ). The increase in children doing as they were told correlated with their mothers trying to manipulate their behaviour more frequently ( $r = .48$ :  $p < 0.05$ ).

At school, there was a correlation between children trying to get the teachers' attention, with teachers writing on the board ( $r = .61$ ), and with teachers ignoring children ( $r = .64$ ) (both significant at  $p < 0.01$ ), perhaps hardly surprising. At the same time, in contrast to ESN (M) children, there was a positive correlation between teachers keeping an eye on children and smiling with children smiling and showing concern ( $r = .53$ :  $p < 0.05$ ).

### 5.3.5 Summary

Briefly, these results show that there are few associations between children's behaviour at home and at school, and little relationship between the types of behaviour they experience in these two environments. However, there was greater reciprocity in adult/child interactions if they were verbal than if they were non-verbal, particularly at home. At school there were more associations between categories of child and adult verbal behaviour in ESN (M) classrooms than there were in Normal classrooms.

## 5.4 ANALYSIS OF VARIANCE

### 5.4.1 All Sub-Categories by GROUP (ESN (M) or normal) by LOCATION (home and school)

Analyses of variance were carried out on all of the sub-categories of adult and child behaviour by the children's group and by the location. Each sub-category was analysed twice: once using the actual frequency of each behaviour subcategory and once on the proportion of a major category that each sub-category comprised. [Transformations were also carried out on all 20 sub-categories.

For example, the proportion that mothers' verbal control comprised all mothers' verbal behaviour was compared to the proportion that teachers' verbal control comprised all teachers' verbal behaviour.]

a) Adult Behaviour

The tables below show all cases of significant results for both the actual frequencies and the proportional scores in all sub-categories. Table 5.4 is a summary of the ANOVA results of all adult behaviour by group and location.

TABLE 5.4

SUMMARY OF ANOVA RESULTS OF ADULT VERBAL AND NON-VERBAL  
BEHAVIOUR BY GROUP AND LOCATION

VERBAL		FREQUENCY		PROPORTION	
		HOME	SCHOOL	HOME	SCHOOL
CONTROL	ESN	6.6	9.8	18%	29%
	NOR	4.3	12.0	10%	16%
CARE	ESN	17.2	16.8	45%	40%
	NOR	22.3	23.8	52%	45%
INITIATION	ESN	6.5	8.4	20%	20%
	NOR	8.7	14.6	20%	26%
ACCEPTANCE	ESN	3.8	2.9	9%	7%
	NOR	4.3	2.2	12%	4%
RESISTANCE	ESN	3.6	1.7	8%	4%
	NOR	3.0	1.2	6%	2%
NON-VERBAL					
CONTROL	ESN	1.1	3.9	8%	14%
	NOR	0.6	5.5	2%	12%
CARE	ESN	11.2	11.3	61%	58%
	NOR	17.0	26.5	70%	67%
INITIATION	ESN	1.4	2.4	7%	9%
	NOR	2.1	3.1	11%	8%
ACCEPTANCE	ESN	2.8	1.8	16%	8%
	NOR	2.7	2.7	11%	6%
RESISTANCE	ESN	1.3	2.1	7%	11%
	NOR	1.3	3.0	7%	7%
KEY	<p>— = Significant difference between locations    = Significant difference between status  / = Significant interaction  ESN = ESN (M) children  NOR = Normal children</p>				

Adult Verbal Control (Telling Children what to do)

TABLE 5.5

ANOVA OF ADULT VERBAL CONTROL BY GROUP AND BY LOCATION  
(Frequency and Proportion)

(N: ESN = 19; NOR = 18: d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = 6.58$ (s.d.= 4.97)	$\bar{X} = 9.79$ (s.d.= 3.88)	$\bar{X} = 8.18$ (s.d.= 4.69)	$\bar{X} = .18$ (s.d.= .13)	$\bar{X} = .29$ (s.d.= .12)	$\bar{X} = .24$ s.d.= 14)
Normal	$\bar{X} = 4.28$ (s.d.= 3.72)	$\bar{X} = 12.00$ (s.d.= 7.28)	$\bar{X} = 8.14$ (s.d.= 6.91)	$\bar{X} = .10$ (s.d.= .06)	$\bar{X} = .22$ (s.d.= .07)	$\bar{X} = .16$ s.d.=
TOTAL	$\bar{X} = 5.46$ (s.d.= 4.50)	$\bar{X} = 10.86$ (s.d.= 5.82)	$\bar{X} = 8.16$ (s.d.= 5.84)	$\bar{X} = .14$ (s.d.= .11)	$\bar{X} = .26$ (s.d.= .10)	$\bar{X} = .20$ s.d.=
Sig : Group (f= 00) NS				(f= 4.13) P<0.05		
Location (f= 23.57) P<0.01				(f= 20.88) P<0.01		
Interaction (f= 4.01) N.S.				(f= .00) N.S.		

Table 5.5 shows that ESN (M) children were not told what to do more or less frequently than Normal children, although being told what to do comprised 24 % of all the verbal behaviour they received from parents and teachers, as opposed to 16 % for Normal children, a significant difference. Teachers told children what to do significantly more than mothers both in terms of frequency and proportion of adult verbal behaviour, a result which is perhaps not totally unexpected. In terms of frequency, there was a tendency, although not significant, for ESN (M) children to be told what to do more at home than Normal children, while Normal children were told what to more often at school than were ESN (M) children.

Adult Verbal Care (Talking to or teaching Children)

In terms of frequency, although not in terms of proportion of total adult verbal behaviour, Table 5.6 shows that both mothers

and teachers talked to and, at school taught, the Normal children more than the ESN (M) children. There was no difference between frequencies of mothers talking to children at home and teachers talking to and teaching children at school. It will be seen that the table of proportions indicates that in both locations and for children of both groups general discussion and chatter accounted for over 40 per cent of all verbal interaction received from mothers and teachers.

TABLE 5.6

ANOVA OF ADULT VERBAL CARE BY GROUP AND BY LOCATION  
(Frequency and Proportion)  
(N: ESN = 19; NOR = 18: d.f. = 1)

GROUP	FREQUENCY		TOTAL	PROPORTION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = 17.16$ (s.d. = 12.02)	$\bar{X} = 16.79$ (s.d. = 12.95)	$\bar{X} = 16.97$ (s.d. = 12.33)	$\bar{X} = .45$ (s.d. = .17)	$\bar{X} = .40$ (s.d. = .13)	$\bar{X} = .42$ (s.d. = .15)
Normal	$\bar{X} = 22.28$ (s.d. = 14.91)	$\bar{X} = 23.83$ (s.d. = 10.12)	$\bar{X} = 23.06$ (s.d. = 12.58)	$\bar{X} = .52$ (s.d. = .14)	$\bar{X} = .45$ (s.d. = .11)	$\bar{X} = .48$ (s.d. = .13)
TOTAL	$\bar{X} = 19.65$ (s.d. = 13.56)	$\bar{X} = 20.22$ (s.d. = 12.04)	$\bar{X} = 19.93$ (s.d. = 12.74)	$\bar{X} = .48$ (s.d. = .15)	$\bar{X} = .43$ (s.d. = .13)	$\bar{X} = .45$ (s.d. = .14)
Sig: Group (f= 5.78) P<0.05				(f= 3.58) N.S.		
Location (f= .03) N.S.				(f= 2.89) N.S.		
Interaction (f= .09) N.S.				(f= .06) N.S.		

Adult Verbal Initiation (Asking children questions/calling for attention)

The children's group and location were both significant factors for the number of times mothers and teachers asked children questions. ESN (M) children were asked less questions than Normal children, and children were asked more questions at school than at home. Table 5.7 shows that in terms of proportion of total adult verbal behaviour, ESN (M) children received a lower proportion of



questioning than Normal children, but there was no significant difference between the proportion of questions children received at home and school.

TABLE 5.7

ANOVA OF ADULT VERBAL INITIATION BY GROUP AND BY LOCATION  
(Frequency and Proportion)  
(N: ESN = 19; NOR = 18: d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = 6.45$ (s.d. = 4.72)	$\bar{X} = 8.42$ (s.d. = 6.42)	$\bar{X} = 7.42$ (s.d. = 5.65)	$\bar{X} = .20$ (s.d. = .20)	$\bar{X} = .20$ (s.d. = .09)	$\bar{X} = .20$ (s.d. = .10)
Normal	$\bar{X} = 8.72$ (s.d. = 5.73)	$\bar{X} = 14.61$ (s.d. = 8.40)	$\bar{X} = 11.67$ (s.d. = 7.69)	$\bar{X} = .20$ (s.d. = .07)	$\bar{X} = .26$ (s.d. = .08)	$\bar{X} = .23$ (s.d. = .08)
TOTAL	$\bar{X} = 7.54$ (s.d. = 5.29)	$\bar{X} = 11.43$ (s.d. = 7.99)	$\bar{X} = 9.49$ (s.d. = 7.01)	$\bar{X} = .20$ s.d. = .10)	$\bar{X} = .23$ (s.d. = .09)	$\bar{X} = .22$ (s.d. = .09)
Sig:	Group (f=8.98) P<0.01 Location (f=6.27) P<0.05 Interaction (f=1.52) N.S.			(f=5.07) P<0.05 (f= .83) N.S. (f= .35) N.S.		

Adult Verbal Acceptance (Agreeing with Children)

TABLE 5.8

ANOVA OF ADULT VERBAL ACCEPTANCE BY GROUP AND BY LOCATION  
(Frequency and Proportion)

(N: ESN = 19; NOR = 18; d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = 3.84$ (s.d. = 4.75)	$\bar{X} = 2.89$ (s.d. = 3.65)	$\bar{X} = 3.37$ (s.d. = 3.93)	$\bar{X} = .09$ (s.d. = .08)	$\bar{X} = .07$ (s.d. = .05)	$\bar{X} = .08$ (s.d. = .07)
NOR	$\bar{X} = 4.33$ (s.d. = 3.72)	$\bar{X} = 2.17$ (s.d. = 2.77)	$\bar{X} = 3.25$ (s.d. = 3.35)	$\bar{X} = .12$ (s.d. = .06)	$\bar{X} = .04$ (s.d. = .04)	$\bar{X} = .08$ (s.d. = .07)
TOTAL	$\bar{X} = 4.08$ (s.d. = 3.72)	$\bar{X} = 2.54$ (s.d. = 2.77)	$\bar{X} = 3.31$ (s.d. = 3.35)	$\bar{X} = .10$ (s.d. = .08)	$\bar{X} = .06$ (s.d. = .05)	$\bar{X} = .08$ (s.d. = .07)
Sig: Group (f= .02) N.S. Location (f= 7.52) P<0.01 Interaction (f= 1.15) N.S.				Group (f= .22) N.S. Location (f=13.59)P<0.01 Interaction (f= 8.14)P<0.01		

The children's group did not affect the frequency of mothers' and teachers' agreement with children, although location was a highly significant factor. Children received considerably more agreement from their mothers than they did from their teachers. The significant interaction for the proportional scores shows that at home response to or agreement with their children comprised a greater proportion of mothers' speech to Normal than to ESN (M) children. In contrast, at school, response to or agreement with children comprised a greater proportion of teachers' speech to ESN (M) rather than to Normal children.

Adult Verbal Resistance (Rejecting Children's Behaviour)

TABLE 5.9

ANOVA OF ADULT VERBAL RESISTANCE BY GROUP AND BY LOCATION  
(Frequency and Proportion)

(N: ESN = 19; NOR = 18: d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = 3.63$ (s.d. = 3.89)	$\bar{X} = 1.68$ (s.d. = 2.08)	$\bar{X} = 2.66$ (s.d. = 3.23)	$\bar{X} = .08$ (s.d. = .07)	$\bar{X} = .04$ (s.d. = .03)	$\bar{X} = .06$ (s.d. = .06)
NOR	$\bar{X} = 3.00$ (s.d. = 4.87)	$\bar{X} = 1.17$ (s.d. = 1.25)	$\bar{X} = 2.08$ (s.d. = 3.63)	$\bar{X} = .06$ (s.d. = .06)	$\bar{X} = .02$ (s.d. = .03)	$\bar{X} = .04$ (s.d. = .05)
TOTAL	$\bar{X} = 3.32$ (s.d. = 4.35)	$\bar{X} = 1.43$ (s.d. = 1.72)	$\bar{X} = 2.38$ (s.d. = 3.42)	$\bar{X} = .07$ (s.d. = .07)	$\bar{X} = .03$ (s.d. = .03)	$\bar{X} = .05$ (s.d. = .06)
Sig: Group (f= .51) N.S. Location (f= 6.36) P<0.05 Interaction (f= .01) N.S.				Group (f= 5.62)P<0.05 Location (f= 6.31)P<0.05 Interaction (f= .01)N.S.		

Frequency of verbal resistance did not differ between ESN (M) and Normal children, although a greater proportion of adults' verbal behaviour towards ESN (M) as opposed to Normal children was resistance. Children received more frequent verbal resistance at home than at school, and verbal resistance comprised a greater part of their mothers' verbal behaviour than it did of their teachers.

Summary Adult Verbal Behaviour

It had been hypothesised that children would experience different behavioural environments at home and at school. This was generally confirmed with regard to Adult Verbal Behaviour. The above results show children do not experience the same verbal environment from their mothers at home and from their teachers at school. At school children are controlled more and are asked more questions. At home their own behaviour is verbally responded to

more frequently, both positively (agreement) and negatively (resistance or refusal). In addition, control forms a greater proportion of teachers' verbal behaviour than it does of mothers; but resistance forms a greater proportion of mothers' verbal behaviour than it does of teachers. There was no difference between the amount of verbal care that children experienced at home or at school, both in terms of frequency or proportion.

It had also been hypothesised that ESN (M) children would experience different behavioural environments than Normal children. This was partially confirmed. Normal children were more frequently praised/chatted (verbal care) to than ESN (M) children by mothers and teachers, and were also asked more questions. On the other hand, verbal control and resistance comprised greater proportions of verbal behaviour towards ESN (M) children than towards Normal children.

Adult Non-Verbal Control (Manipulating Children)

TABLE 5.10

ANOVA OF ADULT NON-VERBAL CONTROL BY GROUP AND BY LOCATION  
(Frequency and Proportion)  
 (N: ESN = 19; NOR = 18; d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN	$\bar{X} = 1.05$ (s.d. = 1.27)	$\bar{X} = 3.89$ (s.d. = 6.05)	$\bar{X} = 2.47$ (s.d. = 4.55)	$\bar{X} = .08$ (s.d. = .10)	$\bar{X} = .14$ (s.d. = .16)	$\bar{X} = .11$ (s.d. = .14)
NOR	$\bar{X} = .61$ (s.d. = .98)	$\bar{X} = 5.50$ (s.d. = 6.87)	$\bar{X} = 3.06$ (s.d. = 5.43)	$\bar{X} = .02$ (s.d. = .07)	$\bar{X} = .12$ (s.d. = .12)	$\bar{X} = .07$ (s.d. = .11)
TOTAL	$\bar{X} = .84$ (s.d. = 1.14)	$\bar{X} = 4.68$ (s.d. = 6.42)	$\bar{X} = 2.76$ (s.d. = 4.97)	$\bar{X} = .05$ (s.d. = .08)	$\bar{X} = .13$ (s.d. = .15)	$\bar{X} = .09$ (s.d. = .12)
Sig: Group (f= .27) N.S. Location (f=13.87) P<0.01 Interaction (f= .97) N.S.				Group (f= 2.09) N.S. Location (f= 6.61)P<0.05 Interaction (f= 1.88) N.S.		

The frequency and proportion of adult non-verbal control was not affected by the childrens' group. However, both in terms of frequency and proportion, children received more non-verbal adult control at school than at home, which was also the case for verbal control, and again not altogether surprising (Table 5.10).

Adult Non-verbal Care (Smiling, laughing, and showing concern)

TABLE 5.11

ANOVA OF ADULT NON-VERBAL CARE BY GROUP AND BY LOCATION

(Frequency and Proportion)  
(N: ESN = 19; NOR = 18: d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN	$\bar{X} = 11.16$ (s.d. = 10.80)	$\bar{X} = 11.32$ (s.d. = 6.96)	$\bar{X} = 11.24$ (s.d. = 8.96)	$\bar{X} = .61$ (s.d. = .24)	$\bar{X} = .58$ (s.d. = .24)	$\bar{X} = .60$ (s.d. = .24)
NOR	$\bar{X} = 17.00$ (s.d. = 11.15)	$\bar{X} = 26.50$ (s.d. = 7.91)	$\bar{X} = 21.75$ (s.d. = 10.86)	$\bar{X} = .52$ (s.d. = .12)	$\bar{X} = .45$ (s.d. = .17)	$\bar{X} = .48$ (s.d. = .15)
TOTAL	$\bar{X} = 14.00$ (s.d. = 11.39)	$\bar{X} = 18.70$ (s.d. = 10.63)	$\bar{X} = 16.35$ (s.d. = 11.19)	$\bar{X} = .65$ (s.d. = .20)	$\bar{X} = .62$ (s.d. = .21)	$\bar{X} = .64$ (s.d. = .20)
Sig: Group (f=23.82) P<0.01				Group (f= .98) N.S.		
Location (f= 4.59) P<0.05				Location (f= .13) N.S.		
Interaction (f= 4.30) P<0.05				Interaction (f= .15) N.S.		

There was no significant difference in the proportion of non-verbal care children received at home or at school; and in terms of the proportional scores, the children's group was not a significant factor. However, the significant interaction in the frequency scores shows that while ESN (M) children received the same amount of smiling, laughing, affection concern etc. at home and at school, Normal children received considerably more non-verbal care at school than at home. In addition, Normal children received considerably more non-verbal care than did ESN (M) children generally.

Adult Non-verbal Initiation/Approach and Acceptance

There were no significant differences.

Adult Non-Verbal Resistance (Ignoring Children)

TABLE 5.12

ANOVA OF ADULT NON-VERBAL RESISTANCE BY GROUP AND BY LOCATION

(Frequency and Proportion)  
(N: ESN = 19; NOR = 18: d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN	$\bar{X} = 1.26$ (s.d. = 1.66)	$\bar{X} = 2.10$ (s.d. = 2.21)	$\bar{X} = 1.68$ (s.d. = 2.00)	$\bar{X} = .07$ (s.d. = .10)	$\bar{X} = .11$ (s.d. = .15)	$\bar{X} = .09$ (s.d. = .12)
NOR	$\bar{X} = 1.28$ (s.d. = 1.53)	$\bar{X} = 3.00$ (s.d. = 3.22)	$\bar{X} = 2.14$ (s.d. = 2.63)	$\bar{X} = .07$ (s.d. = .09)	$\bar{X} = .07$ (s.d. = .06)	$\bar{X} = .07$ (s.d. = .08)
TOTAL	$\bar{X} = 1.27$ (s.d. = 1.57)	$\bar{X} = 2.54$ (s.d. = 2.74)	$\bar{X} = 1.90$ (s.d. = 2.31)	$\bar{X} = .07$ (s.d. = .09)	$\bar{X} = .09$ (s.d. = .11)	$\bar{X} = .08$ (s.d. = .10)
Sig: Group (f= .62) N.S. Location (f= 7.76) P<0.01 Interaction (f= .91) N.S.				Group (f= .46) N.S. Location (f= 1.44) N.S. Interaction (f= .39) N.S.		

The amount of non-verbal resistance (i.e. when the children's request for attention was ignored or apparently not perceived) was significantly greater at school than at home. It will be seen that it comprised only a very small proportion of adult non-verbal behaviour (under 10 % except for ESN (M) children whose behaviour tended to be ignored more at school).

Summary of Adult Non-Verbal Behaviour

The hypothesized difference between the behavioural environments children would experience at home and at school was only partially confirmed in terms of non-verbal adult behaviour. Where there were differences between mothers' and teachers' non-verbal behaviour, teachers directed more behaviour (Control and Resistance) towards the children than did mothers. With regard to non-verbal care, while ESN (M) children received the same amount from mothers and teachers, Normal children received more from their teachers.

With the exception of this last finding ESN (M) children did not experience different non-verbal environments from Normal children as hypothesized.

#### CHILD BEHAVIOUR

Having looked at the behavioural environment children experienced from their mothers and teachers, it is now time to look at the children's own behaviour. Table 5.13 gives a summary of all the results from the analysis of children's verbal and non-verbal behaviour by group and location. Only those results which were significant will be elaborated in the following tables and discussion.



TABLE 5.13

SUMMARY OF ANOVA RESULTS OF CHILD VERBAL AND NON-VERBAL  
BEHAVIOUR BY GROUP AND LOCATION

VERBAL		FREQUENCY		PROPORTION	
		HOME	SCHOOL	HOME	SCHOOL
CONTROL	ESN	.5	.1	1%	0%
	NOR	.6	0.0	1%	0%
CARE	ESN	16.3	3.4	48%	19%
	NOR	19.1	2.9	56%	20%
INITIATION	ESN	7.0	8.1	19%	40%
	NOR	5.9	3.9	17%	29%
ACCEPTANCE	ESN	5.0	6.0	19%	28%
	NOR	7.2	4.3	20%	49%
RESISTANCE	ESN	3.6	1.1	13%	7%
	NOR	2.0	.3	5%	2%
NON-VERBAL					
CONTROL	ESN	N/A	N/A	N/A	N/A
	NOR	N/A	N/A	N/A	N/A
CARE	ESN	9.6	3.4	34%	4%
	NOR	12.6	6.4	44%	7%
INITIATION	ESN	5.2	8.6	19%	10%
	NOR	3.2	8.0	13%	9%
ACCEPTANCE	ESN	11.9	45.6	36%	51%
	NOR	9.3	52.8	32%	56%
RESISTANCE	ESN	2.8	31.8	10%	35%
	NOR	2.1	27.6	9%	32%
KEY		= Significant difference between group — = Significant difference between locations / = Significant interaction ESN = ESN (M) children NOR = Normal children N/A = No Analysis			

Child Verbal Control (Children telling mothers and teachers what to do)

TABLE 5.14

ANOVA OF CHILD VERBAL CONTROL BY GROUP AND BY LOCATION  
 (Frequency and Proportion)  
 (N: ESN = 19; NOR = 18; d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = .47$ (s.d. = .84)	$\bar{X} = .05$ (s.d. = .23)	$\bar{X} = .26$ (s.d. = .64)	$\bar{X} = .01$ (s.d. = .02)	$\bar{X} = 00$ (s.d. = .00)	$\bar{X} = .01$ (s.d. = .01)
NOR	$\bar{X} = .61$ (s.d. = 1.15)	$\bar{X} = 00$ (s.d. = 00)	$\bar{X} = .31$ (s.d. = .86)	$\bar{X} = .01$ (s.d. = .02)	$\bar{X} = 00$ (s.d. = .00)	$\bar{X} = .01$ (s.d. = .02)
TOTAL	$\bar{X} = .61$ (s.d. = .99)	$\bar{X} = 00$ (s.d. = .16)	$\bar{X} = .28$ (s.d. = .75)	$\bar{X} = .01$ (s.d. = .02)	$\bar{X} = 00$ (s.d. = .00)	$\bar{X} = .01$ (s.d. = .02)
Sig: Group (f= .06) N.S.			Group (f= .00) N.S.			
Location (f= 9.87) P<0.01			Location (f= .35) N.S.			
Interaction (f= .33) N.S.			Interaction (f= .22) N.S.			

Although children told their mothers what to do significantly more often than their teachers, it should be noted that this sub-category of behaviour occurred very rarely. In addition, although coding reliability was established, no inter-observer reliability could be achieved, as this behaviour was not observed at all when the inter-observer reliability studies were carried. Indeed, there was no occurrence of this behaviour at all during the observations at the normal schools. (Table 5.14).

Child Verbal Care (Children talking and discussing with Adults)

TABLE 5.15

ANOVA OF CHILD VERBAL CARE BY GROUP AND BY LOCATION  
 (Frequency and Proportion)  
 (N: ESN = 19; NOR = 18: d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = 16.26$ (s.d. = 11.74)	$\bar{X} = 3.42$ (s.d. = 4.27)	$\bar{X} = 9.84$ (s.d. = 10.87)	$\bar{X} = .48$ (s.d. = .22)	$\bar{X} = .19$ (s.d. = .14)	$\bar{X} = .34$ (s.d. = .24)
NOR	$\bar{X} = 19.06$ (s.d. = 11.78)	$\bar{X} = 2.94$ (s.d. = 4.61)	$\bar{X} = 11.00$ (s.d. = 12.02)	$\bar{X} = .56$ (s.d. = .14)	$\bar{X} = .20$ (s.d. = .17)	$\bar{X} = .38$ (s.d. = .24)
TOTAL	$\bar{X} = 17.62$ (s.d. = 11.68)	$\bar{X} = 3.19$ (s.d. = 4.38)	$\bar{X} = 10.40$ (s.d. = 11.38)	$\bar{X} = .52$ (s.d. = .19)	$\bar{X} = .20$ (s.d. = .16)	$\bar{X} = .36$ (s.d. = .24)
Sig: Group (f= .34) N.S.			Group (f= .05) N.S.			
Location (f=45.21) P<0.01			Location (f=38.45)P<0.01			
Interaction (f= .58) N.S.			Interaction (f= .85) N.S.			

At school children talked and chatted significantly less than at home (Table 5.15), which is perhaps not altogether surprising. Talking comprised over 50% of all the children's verbal behaviour at home, and 20% at school, a significant difference. The child's group was not a significant factor, although previous results had shown that adults chatted and discussed more with Normal than with ESN (M) children.

## Child Verbal Initiation (Children asking Questions)

TABLE 5.16

ANOVA OF CHILD VERBAL INITIATION BY GROUP AND BY LOCATION  
 (Frequency and Proportion)  
 (N: ESN = 19; NOR = 18; d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = 7.00$ (s.d. = 8.05)	$\bar{X} = 8.10$ (s.d. = 7.46)	$\bar{X} = 7.55$ (s.d. = 7.67)	$\bar{X} = .19$ (s.d. = .14)	$\bar{X} = .40$ (s.d. = .20)	$\bar{X} = .30$ (s.d. = .20)
NOR	$\bar{X} = 5.89$ (s.d. = 4.52)	$\bar{X} = 3.89$ (s.d. = 4.07)	$\bar{X} = 4.89$ (s.d. = 4.36)	$\bar{X} = .17$ (s.d. = .08)	$\bar{X} = .29$ (s.d. = .22)	$\bar{X} = .23$ (s.d. = .17)
TOTAL	$\bar{X} = 6.46$ (s.d. = 6.51)	$\bar{X} = 6.05$ (s.d. = 6.34)	$\bar{X} = 6.26$ (s.d. = 6.38)	$\bar{X} = .18$ (s.d. = .11)	$\bar{X} = .35$ (s.d. = .22)	$\bar{X} = .26$ (s.d. = .19)
Sig: Group (f= .34) N.S.			Group (f= 1.75) N.S.			
Location (f= 0.09) N.S.			Location (f=11.43) P<0.01			
Interaction (f= .58) N.S.			Interaction (f= 3.78) N.S.			

The frequency of children asking questions was not affected by their group or location. However, as a proportion of the observed verbal behaviour, 35% of what they said to their teachers at school comprised asking questions, significantly more than the 18% at home.

Child Verbal Acceptance (Children Responding to Adults)  
TABLE 5.17

ANOVA OF CHILD VERBAL ACCEPTANCE BY GROUP AND BY LOCATION  
(Frequency and Proportion)  
(N: ESN = 19; NOR = 18; d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = 5.00$ (s.d. = 4.78)	$\bar{X} = 5.95$ (s.d. = 6.22)	$\bar{X} = 5.47$ (s.d. = 5.50)	$\bar{X} = .19$ (s.d. = .15)	$\bar{X} = .28$ (s.d. = .20)	$\bar{X} = .24$ (s.d. = .18)
NOR	$\bar{X} = 7.17$ (s.d. = 5.35)	$\bar{X} = 4.28$ (s.d. = 3.29)	$\bar{X} = 5.72$ (s.d. = 4.60)	$\bar{X} = .20$ (s.d. = .10)	$\bar{X} = .49$ (s.d. = .27)	$\bar{X} = .35$ (s.d. = .25)
TOTAL	$\bar{X} = 6.05$ (s.d. = 5.10)	$\bar{X} = 5.13$ (s.d. = 5.02)	$\bar{X} = 5.59$ (s.d. = 5.05)	$\bar{X} = .19$ (s.d. = .12)	$\bar{X} = .38$ (s.d. = .26)	$\bar{X} = .29$ (s.d. = .22)
Sig: Group (f= .04) N.S. Location (f= .72) N.S. Interaction (f= 2.82) N.S.				Group (f= 5.46) P<0.05 Location (f=22.41) P<0.05 Interaction (f= 1.61) N.S.		

The frequency of children agreeing with mothers' or teachers' demands or control, or answering their questions, was not affected by the children's group or location (Table 5.17). However, as a proportion of all they said to their mothers or teachers, Normal children agreed more with their mothers and teachers than did ESN (M) children. Closer inspection of these figures shows that the difference was attributable to the children's different behaviour at school. At home both Normal and ESN (M) children agreed about equally with their parents (19% and 20%). At school Normal children's agreement comprised 49 % of their behaviour. For ESN (M) children agreement comprised 28 %.

Child Verbal Resistance (Children Refusing to do as they are told)

TABLE 5.18

ANOVA OF CHILD VERBAL RESISTANCE BY GROUP AND BY LOCATION  
(Frequency and Proportion)

(N: ESN = 19; NOR = 18; d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = 3.58$ (s.d. = 3.91)	$\bar{X} = 1.05$ (s.d. = 1.47)	$\bar{X} = 2.32$ (s.d. = 3.18)	$\bar{X} = .13$ (s.d. = .14)	$\bar{X} = .07$ (s.d. = .12)	$\bar{X} = .10$ (s.d. = .13)
NOR	$\bar{X} = 2.00$ (s.d. = 2.35)	$\bar{X} = .33$ (s.d. = .77)	$\bar{X} = 1.17$ (s.d. = 1.92)	$\bar{X} = .05$ (s.d. = .05)	$\bar{X} = .02$ (s.d. = .04)	$\bar{X} = .03$ (s.d. = .05)
TOTAL	$\bar{X} = 2.81$ (s.d. = 3.30)	$\bar{X} = .70$ (s.d. = 1.22)	$\bar{X} = 1.76$ (s.d. = 2.69)	$\bar{X} = .09$ (s.d. = .11)	$\bar{X} = .04$ (s.d. = .09)	$\bar{X} = .07$ (s.d. = .11)
Sig: Group (f= 3.76) N.S. Location (f=14.94) P<0.01 Interaction (f= .63) N.S.				Group (f= 5.12) P<0.05 Location (f= 1.11) N.S. Interaction (f= .32) N.S.		

Although the frequency of children saying no, strongly disagreeing or resisting what mothers or teachers said was not affected by the children's status, children resisted mothers more frequently than teachers (Table 5.18). However, in terms of the proportion of child verbal behaviour, ESN (M) children verbally resisted mothers and teachers (10%) significantly more than Normal children (7%).

Summary of Child Verbal Behaviour

It had been hypothesised that children would behave differently at home and at school. In terms of verbal behaviour, this was confirmed. In terms of frequency children told mothers what to do, chatted to them as well as disagreed with them more than they did with teachers. A greater proportion of their conversation at school comprised asking questions and agreeing with their teachers, than it did at home with their mothers. The children's group made no difference in the frequency of verbal behaviour, as had been hypothesised, but agreement with adults comprised a

larger proportion of Normal children's conversation than that of the ESN (M) children. Disagreement or resistance comprised a larger proportion of ESN (M) children's conversation with adults than that of the Normal children.

Child Non-Verbal Control (Children Manipulating Adults)

As the frequency of this behaviour sub-category was so low, and as there were no inter-observer reliability studies for the behaviour, no analyses were carried out.

Child Non-Verbal Care (Children smiling, laughing and showing concern)

TABLE 5.19

ANOVA OF CHILD NON-VERBAL CARE BY GROUP AND BY LOCATION  
(Frequency and Proportion)  
(N: ESN = 19; NOR = 18: d.f. = 1)

GROUP	FREQUENCY		TOTAL	PROPORTION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = 9.58$ (s.d. = 11.41)	$\bar{X} = 3.42$ (s.d. = 2.75)	$\bar{X} = 6.50$ (s.d. = 8.76)	$\bar{X} = .34$ (s.d. = .25)	$\bar{X} = .04$ (s.d. = .03)	$\bar{X} = .19$ (s.d. = .23)
NOR	$\bar{X} = 12.56$ (s.d. = 8.37)	$\bar{X} = 6.39$ (s.d. = 3.60)	$\bar{X} = 9.47$ (s.d. = 7.08)	$\bar{X} = .44$ (s.d. = .18)	$\bar{X} = .07$ (s.d. = .04)	$\bar{X} = .25$ (s.d. = .23)
TOTAL	$\bar{X} = 11.03$ (s.d. = 10.02)	$\bar{X} = 4.86$ (s.d. = 3.49)	$\bar{X} = 7.95$ (s.d. = 8.07)	$\bar{X} = .39$ (s.d. = .22)	$\bar{X} = .05$ (s.d. = .04)	$\bar{X} = .22$ (s.d. = .23)
Sig: Group (f= 2.68) N.S.			Group (f=10.39)P<0.01			
Location (f=14.21) P<0.01			Location (f=85.13)P<0.01			
Interaction (f= .16) N.S.			Interaction (f= .97) N.N.S			

There was no difference in the frequency of non-verbal care (Table 5.19) displayed by ESN (M) and Normal children, but the proportion of their non-verbal behaviour that consisted of smiling, laughing and showing concern was 25% for Normal children, significantly more than for ESN (M) children (19%). All children showed significantly more concern and laughter at home, both in terms of frequency and proportion of total non-verbal behaviour (39% at home, compared to 5% at school). This is perhaps not altogether surprising perhaps, although children received more of this kind of behaviour at school from their teachers than they did at home from their mothers.



Child Non-Verbal Approach (Children trying to get attention)

TABLE 5.20

ANOVA OF CHILD NON-VERBAL APPROACH BY GROUP AND BY LOCATION  
(Frequency and Proportion)

(N: ESN = 19; NOR = 18; d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN	$\bar{X} = 5.16$ (s.d. = 4.40)	$\bar{X} = 8.58$ (s.d. = 5.26)	$\bar{X} = 6.87$ (s.d. = 5.09)	$\bar{X} = .19$ (s.d. = .14)	$\bar{X} = .10$ (s.d. = .05)	$\bar{X} = .14$ (s.d. = .11)
NOR	$\bar{X} = 3.17$ (s.d. = 2.26)	$\bar{X} = 8.00$ (s.d. = 5.39)	$\bar{X} = 6.09$ (s.d. = 4.60)	$\bar{X} = .13$ (s.d. = .10)	$\bar{X} = .08$ (s.d. = .05)	$\bar{X} = .10$ (s.d. = .08)
TOTAL	$\bar{X} = 4.19$ (s.d. = 3.62)	$\bar{X} = 8.00$ (s.d. = 5.29)	$\bar{X} = 6.09$ (s.d. = 4.89)	$\bar{X} = .16$ (s.d. = .12)	$\bar{X} = .09$ (s.d. = .05)	$\bar{X} = .12$ (s.d. = .10)
Sig: Group (f= 2.15) N.S. Location (f=14.21) P<0.01 Interaction (f= .16) N.S.				Group (f= 3.36) N.S. Location (f= 6.19) P<0.05 Interaction (f= .03) N.S.		

Both ESN (M) and Normal children tried to get attention on about the same number of occasions, and it did not significantly differ in the proportion of non-verbal behaviour it accounted for (Table 5.20). Although children tried to get attention significantly more frequently from their teachers than from their mothers, because children's non-verbal behaviour as a whole was higher at school than at home, getting attention comprised a greater proportion of their behaviour at home (16 %) than at school behaviour (9%).

## Child Non-Verbal Acceptance (Children doing as they were told)

TABLE 5.21

ANOVA OF CHILD NON-VERBAL ACCEPTANCE BY GROUP AND BY LOCATION  
(Frequency and Proportion)

(N: ESN = 19; NOR = 18: d.f. = 1)

GROUP	FREQUENCY			PROPORTION		
	LOCATION		TOTAL	LOCATION		TOTAL
	Home	School		Home	School	
ESN (M)	$\bar{X} = 11.89$ (s.d. = 13.90)	$\bar{X} = 45.63$ (s.d. = 7.65)	$\bar{X} = 28.76$ (s.d. = 20.17)	$\bar{X} = .36$ (s.d. = .23)	$\bar{X} = .51$ (s.d. = .09)	$\bar{X} = .44$ (s.d. = .19)
NOR	$\bar{X} = 9.33$ (s.d. = 7.40)	$\bar{X} = 52.78$ (s.d. = 5.07)	$\bar{X} = 31.06$ (s.d. = 22.90)	$\bar{X} = .32$ (s.d. = .15)	$\bar{X} = .56$ (s.d. = .07)	$\bar{X} = .44$ (s.d. = .17)
TOTAL	$\bar{X} = 10.65$ (s.d. = 10.77)	$\bar{X} = 49.11$ (s.d. = 7.38)	$\bar{X} = 29.88$ (s.d. = 21.42)	$\bar{X} = .34$ (s.d. = .19)	$\bar{X} = .54$ (s.d. = .09)	$\bar{X} = .44$ (s.d. = .19)
Sig: Group (f= 1.08) N.S. Location (f= 3.92) P<0.01 Interaction (f= 6.20) P<0.05				Group (f= .31) N.S. Location (f=24.09) P<0.01 Interaction (f= .14) N.S.		

In terms of proportional scores, 'doing as they were told' comprised significantly more of the children's non-verbal behaviour at school than it did at home. This might be expected, as this sub-category included attending to the teacher and working quietly at school (Table 5.21). With regard to the frequency scores, there was a significant interaction. This was due to the fact that, while there was no significant difference between how obedient ESN (M) and Normal children were at home, at school Normal children did as they were told more often than ESN (M) children. However, despite this interaction, results suggest that the major difference in the frequency scores was related to location. Both ESN (M) and Normal children did as they were told much more frequently at school than at home. The difference between the amount of time ESN (M) and Normal children were on task at school could be due either to different teaching styles and classroom management and/or to a lack of concentration in some ESN (M) children.

Child Non-Verbal Resistance (Children ignoring adults)

TABLE 5.22

ANOVA OF CHILD NON-VERBAL RESISTANCE BY GROUP AND BY LOCATION  
(Frequency and Proportion)  
(N: ESN = 19; NOR = 18: d.f. = 1)

GROUP	FREQUENCY		TOTAL	PROPORTION		TOTAL
	LOCATION			LOCATION		
	Home	School		Home	School	
ESN	$\bar{X} = 2.84$ (s.d. = 3.42)	$\bar{X} = 31.84$ (s.d. = 11.37)	$\bar{X} = 17.34$ (s.d. = 16.87)	$\bar{X} = .10$ (s.d. = .12)	$\bar{X} = .35$ (s.d. = .11)	$\bar{X} = .23$ (s.d. = .17)
NOR	$\bar{X} = 2.11$ (s.d. = 2.22)	$\bar{X} = 27.61$ (s.d. = 8.33)	$\bar{X} = 14.86$ (s.d. = 14.26)	$\bar{X} = .09$ (s.d. = .10)	$\bar{X} = .29$ (s.d. = .08)	$\bar{X} = .19$ (s.d. = .13)
TOTAL	$\bar{X} = 2.49$ (s.d. = 2.88)	$\bar{X} = 29.78$ (s.d. = 10.10)	$\bar{X} = 16.13$ (s.d. = 15.60)	$\bar{X} = .10$ (s.d. = .11)	$\bar{X} = .32$ (s.d. = .10)	$\bar{X} = .21$ (s.d. = .15)
Sig: Group (f= 1.99) N.S. Location (f= 266.) P<0.01 Interaction (f= 1.10) N.S.				Group (f= 1.18) N.S. Location (f=69.88)P<0.01 Interaction (f= .00) N.S.		

The very large, and significant difference between children's behaviour at home and at school, is related to the fact that at school this sub-category comprised any behaviour which indicated the child was apparently not attending to the teacher or getting on with his/her work. It will be noticed that over a third of the times the ESN (M) children were observed at school they were not working or attending, and Normal children were only a little better (29%). At home, children only rarely ignored their mothers, or disobeyed them when they should have been attending.

Summary of Child Non-Verbal Behaviour

It had been hypothesised that children would behave differently at home and at school, and that whether they were ESN (M) or Normal would affect their behaviour. The first of these hypotheses was confirmed with regard to non-verbal behaviour, but the second hypothesis was only partially confirmed. The major differences in the frequency of children's non-verbal behaviour related to the

situation (home or school) rather than the children's group (ESN [M] or Normal). As might be expected there was more laughter, smiling and concern displayed at home, but children tried to get attention more at school. Normal children's behaviour comprised a greater proportion of concern and care than did ESN (M) children's behaviour, and Normal children did as they were told more often than ESN (M) children at school, although there was no significant difference between the children at home.

### 5.5 Subsidiary Results

Having presented the major results, subsidiary factors are now considered. In order to clarify effects, results from subsidiary variables have been considered as they affect each behavioural sub-category in turn, although a summary of the effect of each subsidiary variable's effects will be found at the end of the chapter.

It is appreciated that the number of subjects in some cells in the subsidiary results are particularly low, and unevenly distributed, both of which facts will affect the results. In the case of ESN (M) children this was particularly the case with regard to class (working class = 4, middle class = 15). In the case of Normal children, subjects were distributed unevenly between age (above 13.6 = 5, below 13.6 = 13) and teacher's sex (male teachers = 5, female teachers = 13).

#### Adult Verbal Control

The child's sex, age, class or group did not affect how much mothers told their children what to do; and at school the child's sex, age, class, and the teacher's sex were not significant variables in connection with how much the children were told what to do by their teachers.

#### Adult Verbal Care

The only significant factor which affected mothers' chatter and praise to their children was Socio-economic class. For this there was an interaction on the frequency scores ( $f = 5.69$ ;  $df = 1$ ,  $P < 0.05$ ). Middle class mothers chatted to their ESN (M) children on average 27 times, but to Normal children only 17.8 times. In contrast, working class mothers chatted to ESN (M) children 14.5 times but to Normal children 27.9 times

In the case of teachers, it was not a child variable, but the teachers' sex which affected how much they talked to, praised and taught children. Table 5.23 below illustrates.

TABLE 5.23

ANOVA OF TEACHERS' VERBAL CARE BY GROUP AND BY TEACHERS' SEX  
(Frequency and Proportion)

GROUP	FREQUENCY		TOTAL	PROPORTION		TOTAL
	TEACHERS' SEX			TEACHERS' SEX		
	Female	Male		Female	Male	
ESN (M)	$\bar{X} = 24.50$ (s.d. = 15.11) N = 8	$\bar{X} = 11.18$ (s.d. = 7.74) N = 11	$\bar{X} = 16.79$ (s.d. = 12.95) N = 19	$\bar{X} = .49$ (s.d. = .10) N = 8	$\bar{X} = .34$ (s.d. = .12) N = 11	$\bar{X} = .40$ (s.d. = .13) N = 19
NOR	$\bar{X} = 25.15$ (s.d. = 9.21) N = 13	$\bar{X} = 20.40$ (s.d. = 12.68) N = 5	$\bar{X} = 23.83$ (s.d. = 10.12) N = 18	$\bar{X} = .43$ (s.d. = .12) N = 13	$\bar{X} = .50$ (s.d. = .10) N = 5	$\bar{X} = .45$ (s.d. = .11) N = 18
TOTAL	$\bar{X} = 24.90$ (s.d. = 11.44) N = 21	$\bar{X} = 14.06$ (s.d. = 10.12) N = 16	$\bar{X} = 20.22$ (s.d. = 12.04) N = 37	$\bar{X} = .45$ (s.d. = .11) N = 21	$\bar{X} = .39$ (s.d. = .14) N = 16	$\bar{X} = .43$ (s.d. = .13) N = 37
d.f. = 1						
Sig.:	Group	N.S.	(f = 1.24)	Group	N.S.	(f = .99)
	T.'s Sex	P<0.05	(f = 6.45)	T.'s Sex	N.S.	(f = 2.04)
	Interaction	N.S.	(f = 1.27)	Interaction	P<0.01	(f = 7.64)

Female teachers talked to and praised children more frequently than male teachers, and in terms of proportion (Table 5.23), there was a highly significant interaction. A slightly greater proportion of female teachers's speech towards ESN (M) children was teaching, encouragement etc. (49%) as compared to 43% towards Normal children. Conversely, male teachers talked, discussed and praised ESN (M) children for only 34% of the time, but 50% of the time they spoke to Normal children.

#### Adult Verbal Initiation

Only the child's age affected the frequency of mothers asking the children questions. Here younger children were asked significantly fewer questions than older children, 6.6 times on average as opposed to 9.3 times (f = 4.55, df = 1, P<0.05).

The picture that emerges from the school observations is that the children's group and the teachers' sex were the only significant factors that affected teachers' asking children questions (Table 5.24). The effect of group showed up in four of the analyses of frequencies, but in only two cases of the proportional scores, suggesting that the latter result was only weakly significant in accounting for the total variance.

TABLE 5.24

ANOVA OF TEACHERS' VERBAL INITIATION BY GROUP AND BY TEACHERS' SEX  
(Frequency and Proportion)

GROUP	FREQUENCY			PROPORTION		
	Teachers' Sex		TOTAL	Teachers' Sex		TOTAL
	Female	Male		Female	Male	
ESN (M)	$\bar{X} = 9.87$ (s.d. = 8.59) N = 8	$\bar{X} = 7.36$ (s.d. = 4.43) N = 11	$\bar{X} = 8.42$ (s.d. = 6.42) N = 19	$\bar{X} = .17$ (s.d. = .09) N = 8	$\bar{X} = .22$ (s.d. = .08) N = 11	$\bar{X} = .20$ (s.d. = .08) N = 19
NOR	$\bar{X} = 16.92$ (s.d. = 8.43) N = 13	$\bar{X} = 8.60$ (s.d. = 4.93) N = 5	$\bar{X} = 14.61$ (s.d. = 8.40) N = 18	$\bar{X} = .28$ (s.d. = .07) N = 13	$\bar{X} = .23$ (s.d. = .09) N = 5	$\bar{X} = .26$ (s.d. = .08) N = 18
TOTAL	$\bar{X} = 14.24$ (s.d. = 8.99) N = 21	$\bar{X} = 7.75$ (s.d. = 4.46) N = 16	$\bar{X} = 11.43$ (s.d. = 7.99) N = 37	$\bar{X} = .23$ (s.d. = .10) N = 21	$\bar{X} = .22$ (s.d. = .08) N = 16	$\bar{X} = .23$ (s.d. = .09) N = 37
d. f. = 1						
Sig.:	Group	N.S.	(f = 3.62)	Group	P < 0.05	(f = 5.03)
	T.'s Sex	P < 0.05	(f = 4.18)	T.'s Sex	N.S.	(f = .72)
	Interaction	N.S.	(f = 1.36)	Interaction	N.S.	(f = 2.67)

The table above shows clearly that Normal children were asked proportionately more questions than ESN (M) children by their teachers. Female teachers also asked children questions more frequently than did male teachers, although this did not make up a significantly greater proportion of their speech.

#### Adult Verbal Acceptance

For the mothers there was a significant interaction ( $f = 4.3$ ,  $df = 1$ ,  $P < 0.05$ ) between the children's status and their class. Middle class mothers agreed with ESN (M) children on average more frequently (6.75 times) than with Normal children (3.50); but working class mothers agreed with Normal children on average more often (5.37) than with ESN (M) children (3.07). In one of the four analyses the proportion of time mothers spent agreeing with either ESN (M) or Normal children differed ( $f = 4.3$ ,  $df = 1$ ,  $P < 0.05$ ), i.e. they spent a greater proportion of their time agreeing with Normal rather than ESN (M) children. Because this factor was not significant elsewhere, it suggests that it comprised only a slight tendency to account for the total variation in comparison with other variables.

#### Adult Verbal Resistance

In the Table 5.25 below, it can be seen that there was a significant interaction for both the frequency and proportional scores with regard to mothers' saying no to their children, the children's age and group. Younger ESN (M) children were refused requests or told off more than older ESN (M) children, but it was the older Normal children who were refused or told off more than younger Normal children.

TABLE 5.25

ANOVA OF MOTHERS' VERBAL RESISTANCE BY GROUP AND BY CHILD'S AGE  
(Frequency and Proportion)

GROUP	FREQUENCY			PROPORTION		
	Child's Age		TOTAL	Child's Age		TOTAL
	Below 13.6	Above 13.6		Below 13.6	Above 13.6	
ESN (M)	$\bar{X} = 4.22$ (s.d. = 4.32) N = 9	$\bar{X} = 3.10$ (s.d. = 3.60) N = 10	$\bar{X} = 3.63$ (s.d. = 3.89) N = 19	$\bar{X} = .10$ (s.d. = .08) N = 9	$\bar{X} = .07$ (s.d. = .07) N = 10	$\bar{X} = .08$ (s.d. = .07) N = 19
NOR	$\bar{X} = 1.00$ (s.d. = 1.22) N = 13	$\bar{X} = 8.20$ (s.d. = 7.05) N = 5	$\bar{X} = 3.00$ (s.d. = 4.87) N = 18	$\bar{X} = .04$ (s.d. = .05) N = 13	$\bar{X} = .11$ (s.d. = .07) N = 5	$\bar{X} = .06$ (s.d. = .06) N = 18
TOTAL	$\bar{X} = 2.32$ (s.d. = 3.26) N = 22	$\bar{X} = 4.80$ (s.d. = 5.36) N = 15	$\bar{X} = 3.32$ (s.d. = 4.35) N = 37	$\bar{X} = .06$ (s.d. = .07) N = 22	$\bar{X} = .08$ (s.d. = .07) N = 15	$\bar{X} = .07$ (s.d. = .07) N = 37
d.f. = 1						
Sig.:	Group	N.S.	(f = 00)	Group	N.S.	(f = 2.36)
	Child's Age	N.S.	(f = 3.50)	Child's Age	N.S.	(f = 1.19)
	Interaction	P<0.01	(f = 9.69)	Interaction	P<0.05	(f = 5.29)

There was also a significant interaction between the children's class and status ( $f = 4.29$ ,  $df = 1$ ,  $P < 0.05$ ) at home. Middle class mothers rejected ESN (M) children more than Normal children (5.50 times on average compared to 3.13); but working class mothers rejected Normal children more than ESN (M) children (5.25 compared with 1.20). This interaction was also reflected in Adult Verbal Care and Adult Verbal Acceptance.

#### Adult Non-Verbal Control

In three of the four analyses mothers tried to control their ESN (M) children proportionately more than Normal children (8% compared to 2%:  $P < 0.05$ ). Group did not affect teachers' non verbal control, but the children's sex was significant ( $f = 4.79$ ,  $df = 1$ ,  $P < 0.05$ ). Non-verbal control (mainly writing on the board etc.) comprised 17% of the teachers' actions when boys were observed, but only 11% when girls were observed.



Adult Non-Verbal Care

Mothers did not significantly discriminate between any of the variables. Teachers, on the other hand, reacted quite differently between the ESN(M) and Normal classes, but on no other variable. For teachers, non-verbal care comprised keeping an eye on children, smiling, laughing, and such actions as handing out work and pointing to the page line to help a child read etc. Perhaps surprisingly, then, teachers helped or kept an eye on Normal children more than ESN (M) children (during 26.5 minutes in an hour for Normal rather than 11.03 minutes for ESN (M) children) [ $f = 32.97$ ,  $df = 1$ ,  $P < 0.01$ ]. This quite clearly reflects two styles in teaching. Teachers in normal schools tended to stand and teach from the front of the class, or keep an eye on the class as they wandered round the class as the children got on with their work. In the ESN (M) classes, teachers taught for a time from the front of the class, and then let the children get on themselves, while the teacher helped individual children at the teacher's desk. Children approached the teacher as and when they, the children, required help. Thus, if ESN (M) children did not approach the teacher, and because the teachers was not glancing round the classroom at all frequently, the teacher was less aware if a child was working or off task. (Discussion of Table 5.21 showed that in fact ESN (M) children were on task less frequently than Normal children [child non-verbal acceptance].)

TABLE 5.26

ANOVA OF TEACHERS' NON-VERBAL CARE BY GROUP AND BY TEACHERS' SEX  
(Frequency and Proportion)

GROUP	FREQUENCY		TOTAL	PROPORTION		TOTAL
	Female	Male		Female	Male	
ESN (M)	$\bar{X} = 12.62$ (s.d. = 6.82) N = 8	$\bar{X} = 10.36$ (s.d. = 7.23) N = 11	$\bar{X} = 11.32$ (s.d. = 6.96) N = 19	$\bar{X} = .43$ (s.d. = .20) N = 8	$\bar{X} = .68$ (s.d. = .21) N = 11	$\bar{X} = .58$ (s.d. = .24) N = 19
NOR	$\bar{X} = 26.00$ (s.d. = 8.93) N = 13	$\bar{X} = 27.80$ (s.d. = 4.87) N = 5	$\bar{X} = 26.50$ (s.d. = 7.91) N = 18	$\bar{X} = .66$ (s.d. = .20) N = 13	$\bar{X} = .70$ (s.d. = .14) N = 5	$\bar{X} = .67$ (s.d. = .17) N = 18
TOTAL	$\bar{X} = 20.90$ (s.d. = 10.41) N = 21	$\bar{X} = 15.81$ (s.d. = 10.53) N = 16	$\bar{X} = 18.70$ (s.d. = 10.63) N = 37	$\bar{X} = .57$ (s.d. = .22) N = 21	$\bar{X} = .69$ (s.d. = .19) N = 16	$\bar{X} = .62$ (s.d. = .21) N = 37
d.f. = 1						
Sig.:	Group	P<0.01	(f =32.97)	Group	N.S.	(f =2.41)
	T.'s Sex	N.S.	(f = .03)	T.'s Sex	N.S.	(f =3.30)
	Interaction	N.S.	(f = .58)	Interaction	N.S.	(f =2.13)

Adult Non-Verbal Approach

Mothers again were not affected by any of the variables. Teachers' approach to children showed a highly significant interaction between the teachers' sex and the children's group for both the frequency and proportional scores (Table 5.27). Female teachers approached the ESN (M) children more than Normal children, and male teachers approached Normal children more than ESN (M) children. There had also been a similar interaction with regard to teachers' verbal care.

TABLE 5.27

ANOVA OF TEACHERS' NON-VERBAL INITIATION BY GROUP AND BY TEACHERS' SEX  
(Frequency and Proportion)

GROUP	FREQUENCY			PROPORTION		
	Teachers' Sex		TOTAL	Teachers' Sex		TOTAL
	Female	Male		Female	Male	
ESN (M)	$\bar{X} = 4.62$ (s.d. = 3.93) N = 8	$\bar{X} = .82$ (s.d. = .98) N = 11	$\bar{X} = 2.42$ (s.d. = 3.20) N = 19	$\bar{X} = .14$ (s.d. = .11) N = 8	$\bar{X} = .04$ (s.d. = .05) N = 11	$\bar{X} = .08$ (s.d. = .09) N = 19
NOR	$\bar{X} = 2.38$ (s.d. = 1.66) N = 13	$\bar{X} = 5.00$ (s.d. = 3.08) N = 5	$\bar{X} = 3.11$ (s.d. = 2.37) N = 18	$\bar{X} = .07$ (s.d. = .06) N = 13	$\bar{X} = .11$ (s.d. = .04) N = 5	$\bar{X} = .08$ (s.d. = .05) N = 18
TOTAL	$\bar{X} = 3.24$ (s.d. = 2.88) N = 21	$\bar{X} = 2.12$ (s.d. = 2.68) N = 16	$\bar{X} = 2.76$ (s.d. = 2.81) N = 37	$\bar{X} = .10$ (s.d. = .09) N = 21	$\bar{X} = .07$ (s.d. = .06) N = 16	$\bar{X} = .08$ (s.d. = .08) N = 37
d.f. = 1						
Sig.:	Group	N.S.	(f = .24)	Group	N.S.	(f = .03)
	T.'s Sex	N.S.	(f = 1.42)	T.'s Sex	N.S.	(f = .30)
	Interaction	P<0.01	(f =14.64)	Interaction	p<0.01	(f =6.25)

Adult Non-Verbal Acceptance

There was only one significant interaction with mothers' non-verbal acceptance, the child's age. Mothers spent a greater proportion of their time responding to, complying to the directions, requests etc. of older rather than younger ESN (M) children, but gave proportionately more time to responding to younger rather than older Normal children (Table 5.28).

TABLE 5.28

## ANOVA OF MOTHERS' NON-VERBAL ACCEPTANCE BY GROUP AND BY CHILD'S AGE

GROUP	FREQUENCY			PROPORTION		
	Childs' Age		TOTAL	Child's Age		TOTAL
	Below 13.6	Above 13.6		Below 13.6	Above 13.6	
ESN (M)	$\bar{X} = 2.11$ (s.d. = 2.49) N = 9	$\bar{X} = 3.40$ (s.d. = 3.20) N = 10	$\bar{X} = 2.79$ (s.d. = 2.87) N = 10	$\bar{X} = .10$ (s.d. = .11) N = 9	$\bar{X} = .21$ (s.d. = .16) N = 10	$\bar{X} = .16$ (s.d. = .14) N = 19
NOR	$\bar{X} = 3.15$ (s.d. = 3.46) N = 13	$\bar{X} = 1.650$ (s.d. = 2.30) N = 5	$\bar{X} = 2.72$ (s.d. = 3.19) N = 18	$\bar{X} = .13$ (s.d. = .12) N = 13	$\bar{X} = .06$ (s.d. = .08) N = 5	$\bar{X} = .11$ (s.d. = .11) N = 18
TOTAL	$\bar{X} = 2.73$ (s.d. = 3.07) N = 22	$\bar{X} = 2.80$ (s.d. = 2.98) N = 15	$\bar{X} = 2.76$ (s.d. = 2.09) N = 37	$\bar{X} = .12$ (s.d. = .11) N = 22	$\bar{X} = .16$ (s.d. = .15) N = 15	$\bar{X} = .13$ (s.d. = .13) N = 37
d.f. = 1						
Sig.:	Group	N.S.	(f = .00)	Group	N.S.	(f = 1.98)
	Child's Age	N.S.	(f = .00)	Child's Age	N.S.	(f = .00)
	Interaction	N.S.	(f = 1.78)	Interaction	P<0.05	(f = 5.00)

Adult Non-Verbal Resistance

Mothers' and teachers' resistance was not affected by any of the variables relating to the children. However, female teachers apparently ignored, or did not respond to calls from children, more frequently than did male teachers ( $f = 5.19$ ,  $df = 1$ ,  $P < 0.05$ ).

Summary of Variables affecting Adult Behaviour

The above results have shown how different variables affect mothers and teachers differently in their interactions with specific children.

The children's sex did not correlate with mothers' behaviour towards children. Children's age and class tended to relate to the frequency and proportion of mothers' behaviour, particularly in their speech to the children. The children's group interacted with both the children's age and class on occasions, and once showed a weak tendency to interact with the amount of non-verbal control mothers exert.

Neither the children's age nor class were shown to interact with the teachers' behaviour. The children's sex only correlated with the amount of teacher non-verbal control. Normal children were questioned and talked to, praised and taught more than ESN (M) children, but ESN (M) children were told what to do more often. On five occasions the teachers' sex was an important factor in the frequency and/or proportion of the teachers' behaviour towards the children.

#### Child Verbal Control

To look now at the children's behaviour at home and at school and the effect of different variables. The low frequency of child verbal control both at home and at school, plus the lack of inter-observer reliability on this variable, make consideration of the results very tentative. However, in terms of proportional scores, boys at home told their mother what to do significantly more frequently than did girls (8% compared to 1%:  $f = 4.83$ ,  $df = 1$ ,  $P < 0.05$ ).

#### Child Verbal Care

The children's age related to the amount of time spent talking to their mothers generally (Table 5.29). Older children chatted more (21.9 minutes) than younger children (14.7 minutes) comprising 59% of their speech to mothers as compared with 47% ( $f = 6.5$ ,  $df = 1$ ,  $P < 0.05$  [prop.],  $f = 5.19$ ,  $df = 1$ ,  $P < 0.05$  [freq.]).

TABLE 5.29

ANOVA OF CHILDREN'S VERBAL CARE BY GROUP AND BY CHILD'S SEX (AT SCHOOL)  
(Frequency and Proportion)

GROUP	FREQUENCY		TOTAL	PROPORTION		TOTAL
	Child's Sex Girls	Boys		Child's Sex Girls	Boys	
ESN (M)	$\bar{X} = 2.90$ (s.d. = 3.60) N = 10	$\bar{X} = 4.00$ (s.d. = 5.10) N = 9	$\bar{X} = 3.42$ (s.d. = 4.27) N = 19	$\bar{X} = .19$ (s.d. = .18) N = 10	$\bar{X} = .19$ (s.d. = .10) N = 9	$\bar{X} = .19$ (s.d. = .14) N = 19
NOR	$\bar{X} = .64$ (s.d. = .67) N = 11	$\bar{X} = .6.57$ (s.d. = 5.85) N = 7	$\bar{X} = 2.94$ (s.d. = 4.60) N = 18	$\bar{X} = .11$ (s.d. = .12) N = 11	$\bar{X} = .35$ (s.d. = .13) N = 7	$\bar{X} = .20$ (s.d. = .17) N = 18
TOTAL	$\bar{X} = 1.71$ (s.d. = 2.72) N = 21	$\bar{X} = 5.12$ (s.d. = 5.40) N = 16	$\bar{X} = 3.19$ (s.d. = 4.38) N = 37	$\bar{X} = .15$ (s.d. = .15) N = 21	$\bar{X} = .26$ (s.d. = .14) N = 16	$\bar{X} = .20$ (s.d. = .16) N = 37
d.f. = 1						
Sig.:	Group N.S.	(f = .02)	Group N.S.	(f = 0.08)	Child's Sex P<0.05	(f = 5.10)
	Child's Sex P<0.05	(f = 6.43)	Interaction N.S.	(f = 3.25)	Interaction P<0.05	(f = 4.17)

The factors relating to the children's chatter or discussion with teachers' at school were the children's sex and the teachers' sex. Children spoke significantly more ( $f = 6.92$ ,  $df = 1$ ,  $P < 0.05$ ) to female than to male teachers. In terms of proportional scores, chatter and discussion to female teachers comprised 23% of speech, but to male teachers only 15% ( $f = 7.55$ ,  $df = 1$ ,  $P < 0.01$ ). This accords with previous results which indicated that female teachers tended to talk/praise children more than male teachers.

The table above shows the results relating to the children's sex. Boys chatted to and discussed with teachers significantly more frequently and proportionally more than girls. In terms of proportional scores, the significant interaction shows that although ESN (M) boys and girls did not differ (19% each), 35% of Normal boys' speech consisted of chatter and discussion, as opposed to only 11% of Normal girls' speech.

### Child Verbal Initiation

At home middle class ESN (M) children asked their mothers more questions than did working class ESN (M) children (during 16.2 minutes in a hour compared to 4.5 minutes). However, it was the working class Normal children who asked mothers more questions than middle class Normal children (7.75 compared to 4.40 minutes) ( $f = 13.42$ ,  $df = 1$ ,  $P < 0.01$ ).

Older children spent a greater proportion of time (43%) asking teachers questions than did younger children (29%) ( $f = 5.24$ ,  $df = 1$ ,  $P < 0.05$ ). The children's group was a significant factor in the school observations, with ESN (M) children asking more questions (8.1) than Normal children (3.9). As this occurred in only two analyses, it suggests that group accounted only weakly for the total variation.

### Child Verbal Acceptance

No factors related to how much children agreed with their mothers, and only the children's group was an important factor at school which has already been discussed.

Child Verbal Resistance

TABLE 5.30

ANOVA OF CHILD VERBAL RESISTANCE BY GROUP AT HOME AND AT SCHOOL  
(Frequency and Proportion)

GROUP	AT HOME		AT SCHOOL	
	Frequency	Proportion	Frequency	Proportion
ESN (M)	$\bar{X} = 3.58$ (s.d. = 3.91) N = 19	$\bar{X} = .13$ (s.d. = .14) N = 19	$\bar{X} = 1.05$ (s.d. = 1.47) N = 19	$\bar{X} = .07$ (s.d. = .12) N = 19
Normal	$\bar{X} = 2.00$ (s.d. = 2.35) N = 18	$\bar{X} = .05$ (s.d. = .05) N = 18	$\bar{X} = .33$ (s.d. = .05) N = 18	$\bar{X} = .02$ (s.d. = .04) N = 18
TOTAL	$\bar{X} = 2.81$ (s.d. = 3.30) N = 37	$\bar{X} = .09$ (s.d. = .11) N = 37	$\bar{X} = .70$ (s.d. = 1.22) N = 37	$\bar{X} = .04$ (s.d. = .09) N = 37

Proportional Scores		d.f. = 1	
Sig.: Group	<0.05 (f = 5.10)	Group	P<0.05 (f = 4.30)

The above table shows that for proportional scores, ESN (M) children's speech contained a greater proportion of resistance than did the speech of Normal children. Although the relative frequency of this behaviour is low because, of its very nature, it is possible that mothers and teachers are still acutely aware when children resist them. At school, middle class children also resisted teachers significantly more frequently than working class children (f = 5.32, df = 1, P<0.05).

Child Non-Verbal Control

Because of the very low frequency and the lack of inter-observer reliability of this sub-category, no analyses were carried out.



Child Non-Verbal Care

TABLE 5.31

ANOVA OF CHILDREN'S NON-VERBAL CARE BY GROUP AND BY CHILD'S AGE AT HOME  
(Frequency and Proportion)

GROUP	FREQUENCY			PROPORTION		
	Child's Age		TOTAL	Child's Age		TOTAL
	Below 13.6	Above 13.6		Below 13.6	Above 13.6	
ESN (M)	$\bar{X} = 11.33$ (s.d. = 15.71 N = 9)	$\bar{X} = 8.00$ (s.d. = 5.92 N = 10)	$\bar{X} = 9.58$ (s.d. = 11.41 N = 19)	$\bar{X} = .34$ (s.d. = .30 N = 9)	$\bar{X} = .33$ (s.d. = .21 N = 10)	$\bar{X} = .34$ (s.d. = .25 N = 19)
NOR	$\bar{X} = 9.61$ (s.d. = 5.27 N = 13)	$\bar{X} = 20.20$ (s.d. = 10.66 N = 5)	$\bar{X} = 12.56$ (s.d. = 8.37 N = 18)	$\bar{X} = .38$ (s.d. = .14 N = 13)	$\bar{X} = .58$ (s.d. = .19 N = 5)	$\bar{X} = .44$ (s.d. = .18 N = 18)
TOTAL	$\bar{X} = 10.32$ (s.d. = 10.52 N = 22)	$\bar{X} = 12.07$ (s.d. = 9.51 N = 15)	$\bar{X} = 11.03$ (s.d. = 10.02 N = 37)	$\bar{X} = .37$ (s.d. = .22 N = 22)	$\bar{X} = .42$ (s.d. = .23 N = 15)	$\bar{X} = .39$ (s.d. = .22 N = 37)
d.f. = 1						
Sig.:	Group	N.S.	(f = 1.23)	Group	N.S.	(f = 3.32)
	Child's Age	N.S.	(f = .65)	Child's Age	N.S.	(f = .94)
	Interaction	P<0.01	(f = 4.26)	Interaction	N.S.	(f = 1.00)

At home there was little difference in the amount of smiling, laughing and showing concern displayed by the older and younger groups of ESN (M) children to their mothers, but older Normal children smiled etc. more frequently than ESN (M) children. The proportional scores showed no significant differences in this two by two analysis.

Child Non-Verbal Initiation

None of the variables were significant in the school or home observations.

Child Non-Verbal Acceptance

At school the children's group seemed to affect the frequency of their non-verbal response to teachers, except in the analyses with the children's or teachers' sex. Normal children either attended

to what the teacher was saying, or got on with their writing or reading etc. more frequently (52.8 minutes) than did ESN (M) children (45.6 minutes) ( $f = 9.05$ ,  $df = 1$ ,  $P < 0.05$ ).

Child Non-Verbal Resistance

TABLE 5.32

ANOVA OF CHILD NON-VERBAL RESISTANCE BY GROUP AND BY CHILD'S SEX  
(Frequency and Proportion)

GROUP	FREQUENCY		TOTAL	PROPORTION		TOTAL
	Child's Sex			Child's Sex		
	Girls	Boys		Girls	Boys	
ESN (M)	$\bar{X} = 4.10$ (s.d. = 4.25) N = 10	$\bar{X} = 1.44$ (s.d. = 1.3) N = 9	$\bar{X} = 2.84$ (s.d. = 3.42) N = 19	$\bar{X} = .13$ (s.d. = .14) N = 10	$\bar{X} = .07$ (s.d. = .10) N = 9	$\bar{X} = .10$ (s.d. = .12) N = 19
NOR	$\bar{X} = 1.54$ (s.d. = 2.11) N = 11	$\bar{X} = 3.00$ (s.d. = 2.24) N = 7	$\bar{X} = 2.11$ (s.d. = 2.22) N = 18	$\bar{X} = .06$ (s.d. = .08) N = 11	$\bar{X} = .14$ (s.d. = .11) N = 7	$\bar{X} = .09$ (s.d. = .10) N = 18
TOTAL	$\bar{X} = 2.76$ (s.d. = 3.48) N = 21	$\bar{X} = 2.12$ (s.d. = 1.89) N = 16	$\bar{X} = 2.49$ (s.d. = 2.88) N = 37	$\bar{X} = .09$ (s.d. = .12) N = 21	$\bar{X} = .10$ (s.d. = .11) N = 16	$\bar{X} = .10$ (s.d. = .11) N = 37
d.f. = 1						
Sig.:	Group	N.S.	(f = .75)	Group	N.S.	(f = .34)
	Child's Sex	N.S.	(f = .59)	Child's Sex	N.S.	(f = .84)
	Interaction	P<0.05	(f = 5.00)	Interaction	P<0.05	(f = 5.92)

The significant interactions in the above table show that ESN (M) girls ignored their mothers' questions or did not do as they were told more than did ESN (M) boys. However, Normal girls ignored their mothers less than normal boys.

At school children went off task or ignored male teachers significantly more frequently (during 34.2 minutes in an hour) than they ignored female teachers (26.4 minutes) ( $f = 4.78$ ,  $df = 1$ ,  $P < 0.05$ ).

## 5.6 Summary

### 5.6.1 Main results

Although the data from the observations had been basically collected in terms of exploring what kinds of behaviour children were displaying at home and at school, and the constituents of the behavioural environments they were experiencing with their mothers and their teachers, it had been broadly hypothesised that:

- a) Children would behave differently and would experience different behavioural environments at home and at school
- b) ESN (M) and Normal children would behave differently and would experience different behavioural environments at home
- c) ESN (M) and Normal children would behave differently and would experience different behavioural environments at school.

The results have only partially supported these broad hypotheses.

Firstly, there would appear to be little similarity between children's behaviour at home and at school. This is particularly true of ESN (M) children, whose verbal behaviour at school could not be predicted at all from their verbal behaviour at home. However, as there were very few correlations between the verbal environment the children experienced from mothers and teachers, this may not be altogether surprising.

For Normal children the few correlations between their verbal behaviour at home and at school were not between the same sub-categories of behaviour, i.e. a child who asked a lot of questions at school did not do so at home. They too experienced environments which rarely correlated.

In terms of both ESN (M) and Normal children's non-verbal behaviour, there was only one correlation between home and school. ESN (M) children who smiled, laughed and were generally sociable (Child Non-Verbal Care) at home behaved similarly at school. There were no correlations between the non-verbal environment Normal children experienced at home and at school.

The adult/child interactions point to greater reciprocity between verbal than non-verbal interaction. For instance, all sub-

categories of mothers' speech correlated positively with all sub-categories of what ESN (M) children were saying (mostly significantly), but never significantly with what the children were doing (Non-Verbal Behaviour).

The majority of Normal children's speech also positively correlated with what their mother was saying, but unlike the ESN (M) children 2 sub-categories of the Normal children's non-verbal behaviour correlated with what their mothers were saying, e.g. they smiled and laughed when their mothers were chatting to them; and they did as they were told.

At school, the vast majority of verbal interactions between ESN (M) children and teachers correlated. For Normal children this was not the case, although in the latter instance, teachers' telling children off or refusing their requests correlated positively with normal children asking questions, agreeing or disagreeing with their teachers.

ESN (M) children who went off task less received more encouragement and were asked questions at school, although this did not seem to affect how much they got on with their work (such as writing, reading or attending). [It should be noted that if a child was not displaying non-verbal acceptance at school e.g. working, this did not necessarily mean he/she was off task (non-verbal rejection). Either he could be talking to the teacher, or the teacher had not specifically directed any behaviour such as at the beginning or end of a class.]

For both ESN (M) and Normal children, smiling and laughter correlated with smiling and laughter in their mothers. Compliance (Non-Verbal Acceptance) in mothers of ESN (M) children related to their children's instructions (verbal control), but ESN (M) children's resistance related to mothers' attempts to control them non-verbally. A tendency in mothers of Normal children to smile and laugh correlated with their children's chatter, a correlation not found with the ESN (M) child/mother interactions. Generally, there were few other correlations between ESN (M) and normal children's speech and what mothers did.

At school, there was a positive correlation (mostly significant) between what ESN (M) children said with what the teacher was doing, very different from the picture of Normal children and their teachers, where there were few correlations. Teachers' actions correlated with few actions of ESN (M) and Normal children in the class. The most striking finding is that teachers' smiling and laughing correlated positively with similar behaviour from Normal children, but negatively with that of ESN (M) children.

Overall, for ESN (M) children in particular, speech rather than actions was a better predictor of what was going to happen at home and at school.

The major hypotheses had been that children would experience different behavioural environments at home and at school, and that children would behave differently in the two environments. These hypotheses were partially confirmed. It had also been hypothesised that ESN (M) and Normal children would behave differently and experience different behavioural environments. There was only partial confirmation of these hypotheses.

Looking at the ANOVA results, perhaps the most striking difference which arises is that when one compares ESN (M) and Normal children, if the adult/ESN (M) child interaction for a particular sub-category of behaviour was greater in frequency or proportion than for Normal children, it tended to be in the form of control or resistance. For the adult/Normal child interactions, the greater frequencies or proportions were in terms of chatting, praise, asking questions, and accepting what the child was doing or saying, and showing concern, smiling etc. Although the results are not quite as clear cut as this summary indicates, this tendency suggests a different, and for the ESN (M) children, less accepting behavioural environment.

The differences between school and home observed behaviours are more expected. Children received more verbal control at school than at home, but this included children being told what work they were to do, etc., so that the greater frequency and proportion at school compared to home is understandable. Children were also asked more questions by their teachers than by their

mothers, this probably occurring because teachers used this as a method of teaching. At the same time, children were controlled more frequently at school than at home, but their teachers also ignored their attempts to get attention more frequently than did their mothers, possibly because teachers had more demands on their time than did mothers. Although there was no difference in the amount of non-verbal care (smiling and laughing etc.) that ESN (M) children received at home and at school, Normal children received more at school than at home.

In contrast, mothers agreed with their children more frequently than did teachers, but at the same time told them off or disagreed with them more frequently.

Children tried to control their mothers more frequently than their teachers, although this behaviour occurred rarely. At the same time, they talked more to their mothers than to their teachers and disagreed with them more frequently. Children also displayed more laughter and smiling at home than they did at school.

In contrast, children spent a greater proportion of their conversation with their teachers in both asking question and agreeing with what their teachers said. Although they tried to get their teachers' attention more frequently than their mothers' attention, this took up a greater proportion of their non-verbal behaviour at home than it did at school. This was probably because the greatest proportion of non-verbal behaviour at school was involved in either working (non-verbal acceptance) or going off task (non-verbal resistance). Children went off task more frequently at school than at home, and non-verbal acceptance comprised a greater proportion of time at school than at home - hardly surprising. However, a significant interaction showed that while ESN (M) children did as they were told more frequently at home than Normal children, at school Normal children were on task more frequently than ESN (M) children (Table 5.34 summarises the results).

TABLE 5.33

## SUMMARY OF RESULTS OF GROUP AND LOCATION\*

Behaviour Sub-category	Frequency		Proportion	
	Group	Location	Group	Location
Adult Verbal Control Care Approach Acceptance Rejection		School	ESN (M)	School
	Normal			
	Normal	School	Normal	
		Home		(I)
		Home	ESN (M)	Home
Adult Non-Verbal Control Care Approach Acceptance Rejection		School		School
	Normal	(I)		
		School		
Child Verbal Control Care Approach Acceptance Rejection		Home		
		Home		Home
				School
			Normal	School
		Home	ESN (M)	
Child Non-Verbal Control Care Approach Acceptance Rejection				
		Home	Normal	Home
		School		Home
		(I)		School
		School		School

\*Entry indicates significant result and the status or location which received or directed more behaviour.

I = interaction

## 5.6.2 ANOVA on subsidiary analyses

Table 5.35 below gives an outline of those subsidiary factors which significantly affected behavioural sub-categories.

TABLE 5.34

## EFFECT OF SUBSIDIARY VARIABLES ON BEHAVIOURAL SUBCATEGORIES

<u>HOME OBSERVATIONS</u>				<u>SCHOOL OBSERVATIONS</u>			
Behaviour Sub-Categ.	Child's			Child's		Teacher's	
	Sex	Age	S.E.S.	Sex	Age	S.E.S.	Sex
<u>Adult Verbal</u>							
Control				*	*		
Care			I				I
Approach	X			*	*	*	I
Accept.			I				
Resist.	I		I			*	
<u>Adult Non-Verbal</u>							
Control	*		*	X			
Care				*	*	*	I
Approach							I
Accept.	I						
Resist.							X
<u>Child Verbal</u>							
Control	X						
Care		X		I			X
Approach			I		X	*	*
Accept.				*	*	*	*
Resist.		*				X*	
<u>Child Non-Verbal</u>							
Control							
Care		I		*	*	*	*
Approach					*	*	
Accept.					*	*	
Resist.	I					*	X

X = Column variable was a significant factor

\* = Group was a significant factor

I = Interaction



### Child's Sex

Mothers' behaviour did not differ towards boys or girls, although teachers' non-verbally controlled boys more than girls. Boys and girls behaved differently at home in terms of the amount of control (both verbal and non-verbal) they tried to exert and in non-verbal rejection. At school, the child's sex interacted with his/her group in terms of how much they talked and chatted to their teacher.

### Child's Age

At home, the child's age interacted with the children's group in terms of mothers' verbal resistance, and non-verbal acceptance. Teachers, however, did not behave differently to younger or older children. Older children talked more to their mothers, and the children's age interacted with their group in terms of non-verbal care directed towards their mothers. At school, older children asked more questions than younger children.

### Child's Socio-Economic Class

There were significant interactions between the child's group and class with regard to mothers' verbal care, acceptance and resistance, and child's verbal approach. In each case, the trend was the same. In other words, middle class mothers either agreed with, chatted to, or resisted their ESN (M) children more than their Normal children. Conversely, working class mothers agreed with, chatted to, or resisted their Normal children more than their ESN (M) children. Perhaps this was related to the fact that middle class mothers were particularly aware of the ESN (M) children's learning difficulties, and their wish to compensate for this. At the same time, middle class ESN (M) children asked more question of their mothers than their working class counterparts; but working class Normal children asked more question than ESN (M) children at home.

At school, teachers did not behave differently to middle or working class children. Middle class children verbally resisted their teachers more than did working class children.

### Child's Group

As the table above shows, the largest variation caused by any variable was the children's group. In particular, it is noticeable that whether children were ESN (M) or Normal, they did not behave in a highly different manner at home. There was a strong tendency for mothers to control ESN (M) children non-verbally than Normal children, but mothers' behaviour showed no other especially consistent results. At school the picture was different. In particular, teachers asked Normal children more questions, and Normal children responded more than ESN (M) children, showing a synchronization of teacher/child interaction in Normal schools. Secondly, teachers of Normal children kept an eye on and smiled etc. at their pupils more than teachers of ESN (M) children, and in turn Normal children showed more concern towards their teachers and smiled at them more often etc. than did ESN (M) children.

### Teachers' Sex

Finally, it appears that the male and female teachers showed considerable variation in their behaviour towards the children in the class, although the children's behaviour differed between female and male teachers on only a few occasions.

6.

## RESULTS: QUESTIONNAIRES

6.1 Introduction

The questionnaire was individually completed by mothers and teachers for each of the 19 ESN (M) and 18 Normal children. It was administered verbally to all subjects, and the researcher recorded all the replies.

The results of the observations had indicated that children's behaviour at school, for both the ESN (M) and Normal groups, gave little indication of how they behaved at home, or vice versa. Certain behaviour categories differed significantly between home and school. In addition, whether children were ESN (M) or Normal also affected their behaviour, and how their mothers and teachers reacted to them. The purpose of the questionnaire was a) to compare mothers' and teachers' ratings of the same children; b) to compare ratings of ESN (M) and Normal children; and c) to extend the range of behaviours relating to independence and social skills to those which could not be observed during an hour spent at home or in the school class-room.

6.2 Analysis

The following analyses were carried out on the questions:-

1) ESN (M) Children

- a) All questions relating to occurrence and frequency of behaviour, or children's capability to perform these skills were analysed using Kendall's tau to establish whether mothers and teachers agreed in their assessments.
- b) All questions relating to occurrence and capability were analysed using Wilcoxon matched pairs to establish if mothers and teachers tended to differ in how they assessed the children as a group.
- c) Questions relating to reasons for non-occurrence are discussed on a qualitative basis, as the numbers were so low that statistical analysis was inappropriate.
- d) The overall tendency to give some reasons for non-occurrence rather than others was analysed using Kendall's tau.

## 2) Normal Adolescents

As a) to d) above.

## 3) Mothers' and Teachers' Assessments

All questions relating to occurrence, frequency or capability of behaviour were analysed using Kendall's tau to establish if there was an association between the children's status and how they were rated by their mothers.

## 4) Subsidiary Results

Selected questions to mothers were looked at for the effects of:

- a) Children's age (up to 13.6 years: over 13.6 years)
- b) Children's sex (male: female)
- c) Children's socio-economic status (middle class: working class)
- d) Number of siblings (none: 1-2: 3+)
- e) Birth order (only: eldest: youngest: other)

Selected questions to teachers were looked at for the effects of:-

- a) Children's age
- b) Children's sex
- c) Children's socio-economic status
- d) Teachers' sex (male: female)

## 6.3 Hypotheses

The general hypotheses based on previous studies were as follows:-

- 1) That mothers of ESN (M) children would rate specific independence and social skills displayed by their children as a group in more negative terms than the children's teachers. (one tail)
- 2) That mothers of Normal children would rate specific independence and social skills displayed by their children as a group in more negative terms than the children's teachers. (one tail)
- 3) That mothers' assessments of ESN (M) children would positively correlate with assessments of the same children given by teachers (one tail).
- 4) That teachers' assessments of Normal children would positively correlate with assessments of the same children given by teachers (one tail).

5) That mothers and teachers would rate ESN (M) as generally less independent and socially skilled than Normal children (one tail).

6) That the reasons given by mothers and teachers for non-occurrence of behaviour would differ for ESN (M) and Normal children (two tail).

#### 6.4 Mothers' and Teachers' Assessments of ESN (M) and Normal Children

The results of mothers' and teachers' assessments are presented as summaries of correlations and differences for each question under the 5 major areas considered. For each section there is a table for Mother versus Teacher Assessments of a) ESN (M), and b) Normal children; and a second table of ESN (M) versus Normal children's assessments by a) mothers, and b) teachers. The reader is referred to Appendix 6 where the relevant tables give a more detailed picture of some of the data. It should be noted that teachers were not asked the full range of questions asked of mothers, so some comparisons could not be made. In addition, there were occasions when mothers or teachers did not answer a question because they indicated they did not know.

##### 6.4.1 Practical Self Care

(Tables 6.1 and 6.2; and Appendices 6.01 to 6.06)

##### a) Personal Care

This section covered abilities to wash, dress and keep oneself tidy.

Table 6.1 shows that while mothers and teachers agreed on the amount of reminding to be tidy ESN (M) children needed ( $\tau = .59$ :  $P < 0.01$ :  $N=17$ ), teachers rated ESN (M) children as a group as needing less reminding than did mothers ( $Z = -3.06$ :  $P < 0.01$ :  $N=17$ ) (Appendix 6.02) . This latter result was also found for the Normal group ( $Z = -3.53$ :  $P < 0.01$ :  $N=18$ ). In addition teachers also rated Normal children as being tidier than did mothers ( $Z = -3.53$ :  $P < 0.01$ :  $N=18$ ) (Appendix 6.01).

When it came to differences between the two groups of children as rated by a) mothers and b) teachers, Table 6.2 indicates mothers saw no difference at all, but teachers felt that Normal children as a group needed less reminding to be tidy ( $\tau = -.37$ :  $P < 0.05$ :  $N=36$ ) than ESN (M) children.

b) Economic Skills

These skills centred around having and spending pocket money, understanding the value of money and shopping.

There were no significant differences in the way mothers and teachers rated ESN (M) children as a group in this section (Table 6.1), but they agreed (their scores correlated) in terms of children's understanding of pounds and pence ( $\tau = .35$ ;  $P < 0.05$ ;  $N=19$ ) (Appendix 6.03), and the opportunities children had to shop alone ( $\tau = .37$ ;  $P < 0.01$ ;  $N=19$ ). Most Normal children were rated as understanding well. In contrast ESN (M) children were rated as only having an average or fair understanding.

For the group of children in normal schools, mothers' and teachers' ratings only correlated over Normal children's competency to shop alone ( $\tau = .43$ ;  $P < 0.01$ ;  $N=18$ ) (Appendix 6.05). Teachers rated Normal children as a group as having a better sense of the value of money ( $Z = -2.00$ ;  $P < 0.05$ ;  $N=15$ ) than did mothers.

Mothers indicated no differences between the 19 ESN (M) and 18 Normal children in their opportunities to have pocket money ( $\tau = 0.06$ ;  $P = .30$ ), their ability to spend it sensibly ( $\tau = -.20$ ;  $P = .14$ ), to spend it without help ( $\tau = -.16$ ;  $P = .15$ ), or to be able to budget and save ( $\tau = -.06$ ;  $P = 0.08$ ) [Table 6.2]. However, they rated ESN (M) children as displaying less understanding of money than the Normal group ( $\tau = -.63$ ;  $P < 0.01$ ), and as being less able to shop alone ( $\tau = -.44$ ;  $P < 0.01$ ). Whilst most Normal children were seen capable of shopping for the weekend alone, or at least buying two or three items, only 6 or 7 ESN (M) children were seen as being able to shop for the weekend alone. The majority could only shop for a few items, often needing instructions.

These differences probably related to the lack of opportunity given to ESN (M) compared to Normal children to shop alone by their mothers ( $\tau = -.21$ ;  $P < 0.05$ ). All Normal children were allowed to shop alone, but 4 of the ESN (M) group were not. Mothers of these children indicated that the children were not allowed to shop alone because they felt the child was unable to do so, or because they themselves tended to be "over-protective" (i.e. they would say: "He/she probably could go shopping alone, but I don't like him/her to as I tend to worry.")

c) Domestic Skills

Skills in this section covered daily household chores including preparing a hot drink and cooking snack.

There was no agreement between teachers' and mothers' ratings of ESN (M) or Normal children's ability to undertake a number of domestic chores, often because teachers were unaware of what children could do in this area (Table 6.1). [Contrary to prediction, mothers rated Normal children as needing less help when cooking a light snack ( $Z = -2.37$ ;  $P < 0.05$ ;  $N = 15$ ) than did teachers (Appendix 6.06), probably because mothers were more aware of their children's skills than were teachers.]

Comparisons between the two groups of children (Table 6.2) indicated mothers and teachers tended to think virtually none ( $N=17$ ) of the Normal children needed any help at all when making a hot drink. This was not the case of ESN (M) children. Mothers felt that 8 (and teachers 6) needed some help (Appendix 6.06). However, both mothers ( $\tau = -.47$ ;  $P < 0.01$ ;  $N=34$ ) and teachers ( $\tau = -.40$ ;  $P < 0.05$ ;  $N=34$ ) rated ESN (M) children as needing considerably more help at cooking a light snack for themselves (Appendix 6.07). Despite this, there was no significant difference in the regularity ESN (M) and Normal children had to cook as reported by their mothers ( $\tau = -.17$ ;  $P = .18$ ;  $N=37$ ). This tended to be once or twice a week.

Few children had responsibility for two or more daily tasks at home or at school, but a number had a single task to do each day. At home this comprised washing up, taking out the milk bottles, cleaning the shoes etc. At school it entailed clearing away work or cleaning the board. However, only 4 ESN (M) and 3 Normal children had regular tasks both at home or at school so it was inappropriate to carry out a statistical analysis of the mothers' and teachers' assessments of the children's responsibility in carrying out the tasks without being reminded. However, mothers rated ESN (M) children as needing more reminding than Normal children to do both a single task ( $\tau = -.45$ ;  $P < 0.05$ ;  $N=17$ ) and two or more tasks ( $\tau = -.73$ ;  $P < 0.01$ ;  $N=13$ ).

The major reasons given by mothers for not giving tasks to children were because they did not arrange the housework that way.

Teachers replied that the classroom organisation in their school was not arranged to give children regular tasks, i.e. there was a lack of opportunity rather than children being seen as incompetent.

Table 6.1 Summary of mothers' and teachers' ratings on practical self/care

No.	Questions	Mothers v. Teachers							
		ESN(M) CHILDREN				NORMAL CHILDREN			
		N	Tau	Wilc.	M/T	N	Tau	Wilc.	M/T
<u>Personal Care</u>									
3a	Keeping things tidy	19	.24	-0.47	NS	18	.26	-2.56**	T
3c	Less reminding to be tidy	17	.59**	-3.06**	T	18	.12	-3.53**	T
<u>Economic skills</u>									
6c	Understanding/handling fp	19	.35*	-0.48	NS	17	-.11	-0.74	NS
7c	Understanding value of fp	19	.02	-0.75	NS	15	.04	-2.00*	T
<u>Domestic skills</u>									
11a	Freq. makes hot drink	14	.04	-0.93	NS	5	N/A	-1.00	NS
11c	Needs help to make drink	18	.20	-1.82	NS	17	N/A	-1.34	NS
12a	Freq. cooks light snack	17	.19	-1.58	NS	6	N/A	-0.73	NS
12c	Needs help to cook snack	16	-.25	-0.90	NS	15	N/A	-2.73*	M
13a	Respons. for 1 reg. task	19	-.09	-	-	15	.23	-	-
13c	Less reminding for 1 task	4	N/A	-	-	2	N/A	-	-
14a	Respons. for 2+ reg. tasks	19	-.19	-	-	15	.16	-	-

Key: M/T: Mother (M) or Teacher (T) rates children more competent  
 \* Significant result at  $p < 0.05$   
 \*\* Significant result at  $p < 0.01$   
 NS Not significant  
 N/A Statistics not available



Table 6.2 Summary of mothers' and teachers' ratings on practical self/care

No.	Questions	ESN(M) v. Normal Children					
		MOTHERS' ASSESSMENTS			TEACHERS' ASSESSMENTS		
		N	Tau	E/N	N	Tau	E/N
<u>Personal Care</u>							
1a	Dressing without help	37	-.32	N	-		
1c	Competency in dressing	37	-.18	NS	-		
2a	Washing without help	37		NS	-		
2c	Competency in washing	37	-.05	NS	-		
3a	Keeping things tidy	37	.20	NS	37	-.14	NS
3c	Less reminding to tidy	37	-.03	NS	36	-.37*	N
<u>Economic skills</u>							
4a	Having pocket money	37	.06	NS	-		
4c	Spending p.m. sensibly	37	-.20	NS	-		
5a	Spending p.m. with no help	37	-.16	NS	-		
5c	Saving and budgeting	37	-.26	NS	-		
6c	Understanding/handling $\pounds$	37	-.63**	N	36	-.70**	N
7c	Understanding value of $\pounds$	35	-.21	NS	33	-.66**	N
8a	Opportunity to shop alone	37	-.21*	N	20	-.15	NS
8c	Competency to shop	36	-.44**	N	35	-.50**	N
<u>Domestic skills</u>							
9a	Help generally in home	37	-.10	NS	-		
9c	Competency in helping gen.	37	-.14	NS	-		
10a	Makes own bed	37	-.06	NS	-		
10c	Competency in making bed	32	.15	NS	-		
11a	Freq. of making hot drink	37	-.26	NS	19	-.29	NS
11c	Needs help to make drink	37	-.16	NS	35	-.23	NS
12a	Freq. of cooking snack	37	-.17	NS	23	-.18	NS
12c	Needs help to cook snack	34	-.47**	N	34	-.40*	N
13a	Respons. for 1 reg. task	37	.13	NS	34	.10	NS
13c	Less reminding of 1 task	21	-.45*	N	11	-.07	NS
14a	Respons. for 2+ reg. tasks	37	-.07	NS	34	.09	NS
14c	Less remind. of 2+ tasks	13	-.73**	N	5	N/A	
15a	Helps generally in school		-		24	.18	NS
15c	Competency to help gen.		-		4	N/A	

Key: E/N: ESN(M) or Normal (N) children are seen as more competent  
 \* Significant result at  $p < 0.05$   
 \*\* Significant result at  $p < 0.01$   
 NS Not significant  
 N/A Statistics not available

#### d) Summary

The results covering skills termed practical self care indicate that the only areas where mothers and teachers agree in rating ESN (M) children are over the amount of reminding they need to be tidy, their understanding of the value of money and the number of

opportunities they have to shop alone. There was no agreement over domestic chores, perhaps because this was an area where teachers might have little knowledge. However, these results were not a reflection that mothers and teachers differed significantly in how they rated ESN (M) children as a group. It was only over how much reminding children needed to keep tidy that mothers rated children less well than did teachers, but as this result was also found in the Normal sample, it may reflect the fact that children are more likely to be untidy at home and need more encouragement from their mothers - hardly a surprising finding, or that they were more compliant to requests at school than they were at home.

The major differences in this section occurred when comparisons were made between the two groups of children, i.e. it was whether the children were ESN (M) or Normal that was critical rather than who made the assessment. In all cases where either mothers and teachers rated the children significantly differently, ESN (M) children were seen as less competent or had fewer opportunities. These areas were related to their understanding of money, their opportunities to shop alone and their ability to do this unaided. Taken with both their teachers' and mothers' assessment of them as being less competent to cook, it is reasonable to suggest that what these tasks have in common is both an element of danger and the need to remember relatively long instructions. This last suggestion is corroborated by the other results in this section, where mothers and teachers saw ESN (M) needing more reminding than Normal children to do a number of regular tasks.

#### 6.4.2 Independence

##### a) Autonomy

This term was used to describe activities which involved children generally being away from home unsupervised. i.e. travelling or going out in the evening. It had been hypothesised that mothers and teachers would agree in assessing children's competency, but that ESN (M) children would be rated as less competent than Normal children by both mothers and teachers. These hypotheses were only partially confirmed. (See Tables 6.3 and 6.4; and Appendices 6.07 to 6.11).

Mothers and teachers agreed with regard to which ESN (M) children could travel for short or long distances ( $\tau = .73$ ;  $P < 0.01$ ;  $N = 17$ ;

and  $\tau = .63$ :  $P < 0.01$ :  $N = 16$  respectively) (Table 6.3). The majority of these children travelled alone for short distances usually on buses, but only 4 did so for longer distances (over half an hour's travelling). Table 6.4 illustrates that Normal children travelled alone significantly more frequently for both shorter ( $\tau = -.31$ :  $P < 0.01$ :  $N = 37$ ) and longer distances ( $\tau = -.40$ :  $P < 0.01$ :  $N = 37$ ) (see also Appendix 6.07). Teachers of the Normal children did not know if the children travelled alone.

Reasons given by mothers of ESN (M) children for not allowing their children to travel alone related to either their children's learning difficulties: they thought this would be true for Normal children; or they described themselves as protective, saying the same would apply to their other children.

The question of children's ability to travel alone was examined further. Mothers did not rate ESN (M) children as a group as less competent travelling for either short (Appendix 6.09) or long distances (Appendix 6.08) alone than did teachers (Table 6.3). However, mothers and teachers both rated ESN (M) children as less able to travel alone for longer distances than Normal children ( $\tau = -.75$ :  $P < 0.01$ :  $N = 23$ ; and  $\tau = -.54$ :  $P < 0.01$ :  $N = 34$  respectively). Mothers also rated ESN (M) children as less competent in travelling alone for shorter distances than the Normal group ( $\tau = -.31$ :  $P < 0.01$ :  $N = 34$ ), although the majority of ESN (M) children (11) were seen as capable of travelling alone.

Mothers were also asked a number of questions relating to whether children had their own front door key or went out in the evening either alone or accompanied. The majority of children (ESN (M) = 11: Normal = 12) had their own front door keys, and mothers generally did not express any anxieties about this.

The only significant difference in terms of going out in the evening between the two groups of children was that ESN (M) children were less likely to belong to a club than Normal children ( $\tau = -.26$ :  $P < 0.05$ :  $N = 24$ ) (Appendix 6.10). Only 4 ESN (M) children as opposed to 8 Normal children did so, generally because there were no suitable clubs locally. The majority of children did not go out in the evening either alone or with

friends or family (ESN (M) = 12: Normal = 13). The reasons given for this by mothers of ESN (M) children were a) the children's learning difficulties or personality (N=8); b) that it was fairly normal for children of that age not to be allowed out alone (N=3); or c) that this was because the area was unsafe (N=4) or nobody in the family tended to do so (N=1). Reasons given by mothers of Normal children were a) the child's personality (N=3); b) that it was Normal for children of that age (N=4); or c) that this was typical of the family (N=6). These answers tend to indicate that restricted opportunity was essentially seen as much because of ESN (M) children's inability to cope as it was due to external reasons (family policy or the area in which they lived). For the Normal group reasons were more likely to be for external reasons.

b) Self-Sufficiency

Questions grouped under this heading considered whether children were able to occupy themselves alone either in or out of the home. It had been hypothesized that although mothers and teachers would agree in assessing ESN (M) children, they would rate them as a group as less self-sufficient than Normal children. The hypotheses were only partially confirmed.

Mothers' assessments of ESN (M) compared to Normal children did not differ significantly, the majority seeing both groups of children as being able to cope alone for over two hours (ESN (M) = 12: Normal = 13) (Appendix 6.11). In practice this was often for much longer. A number of mothers who worked indicated that their children might be left alone in the house during most of the morning and afternoon during the school holidays when parents were out at work. Teachers, however, felt that ESN (M) children could be left alone for significantly less time than Normal children ( $\tau = -.44$ :  $P < 0.01$ :  $N = 37$ ) (Appendix 6.11).

When asked about how anxious they would feel about leaving a child alone for the expressed amount of time, there was no significant difference at all in the amount of anxiety expressed by mothers or teachers. Generally both mothers and teachers said they would be quite happy to leave the children alone.

Similarly there were no significant differences in mothers' and teachers' assessments of children's feeling about being left

alone. The majority said the children did not mind, or that they did not like it. Only two children (ESN (M) = 1: Normal = 1) were said to really like being alone as reported by their mothers; and 4 mothers thought their children really hated being left alone (ESN (M) = 2: Normal = 2).

Mothers and teachers agreed over ESN (M) children's opportunity to play alone either in the close vicinity of home ( $\tau = .58$ :  $P < 0.01$ :  $N = 12$ ) or in the local park or neighbourhood ( $\tau = .48$ :  $P < 0.05$ :  $N = 15$ ). There was no significant difference between the two groups of children (Table 6.4), with 12 ESN (M) and 15 Normal children allowed to play alone near home, 11 ESN (M) and 10 Normal children being allowed to play alone at some distance away.

Table 6.3 Summary of mothers' and teachers' ratings on independence

No.	Questions	Mothers v. Teachers							
		ESN(M) CHILDREN				NORMAL CHILDREN			
		N	Tau	Wilc.	M/T	N	Tau	Wilc.	M/T
<u>Independence</u>									
<u>Autonomy</u>									
	16a Travels alone short dist.	17	.76**	-	-		N/A	-	-
	16c Needs help for short dist.	16	.29*	-1.08	NS	17	N/A	-1.34	NS
	17a Travels alone long dist.	13	.63**	-	-		N/A	-	NS
	17c Needs help for long dist.	11	.35	-1.61	NS	11	N/A	-1.61	NS
<u>Self-sufficiency</u>									
	24a Length of time alone	18	.06	-0.08	NS	18	.22	-1.15	NS
	24a Anxiety at leaving alone	18	-.11	-0.31	NS	18	.11	-0.18	NS
	25c Child's anxiety when alone	18	.11	-0.51	NS	17	.29	-0.14	NS
	26a Plays alone near home	12	.58**	-	-	11	.20	-	-
	27a Plays alone in park etc.	15	.48*	-	-	9	-.15	-	-

Key: M/T: Mother (M) or Teacher (T) rates children more competent

\* Significant result at  $p < 0.05$

\*\* Significant result at  $p < 0.01$

NS Not significant

N/A Statistics not available

Table 6.4 Summary of mothers' and teachers' ratings on independence

No.	Questions	ESN(M) v. Normal Children					
		MOTHERS' ASSESSMENTS			TEACHERS' ASSESSMENTS		
		N	Tau	E/N	N	Tau	E/N
<u>INDEPENDENCE</u>							
<u>Autonomy</u>							
16a	Travels alone short dist.	37	-.31**	N	21	-.18	NS
16c	Needs help for short dist.	34	-.31**	N	36	-.23	NS
17a	Travels alone long dist.	37	-.40**	N	14	N/A	
17c	Needs help for long dist.	23	-.75**	N	34	-.54**	N
18a	Has own door key	37	-.09	NS			-
18c	Mothers' anxiety level	25	.15	NS			-
19a	Goes out with M.in even.	37	-.09	NS			-
20a	Goes out alone in evening	37	-.12	NS			-
21a	Goes out with friends	37	-.13	NS			-
22a	Belongs to a club	24	-.26*	N			-
<u>Self-sufficiency</u>							
23a	Is at home alone	37	-.08	NS			-
24a	Length of time alone	36	-.08	NS	37	-.44**	N
24c	Anxiety at leaving alone	37	-.22	NS	36	-.20	NS
25c	Child's anxiety when alone	36	.09	NS	36	-.01	NS
26a	Plays alone near home	37	-.20	NS	23	.04	NS
27a	Play alone in partk etc.	37	-.02	NS	24	.19	NS

Key: E/N: ESN(M) or Normal (N) children are seen as more competent  
 \* Significant result at  $p < 0.05$   
 \*\* Significant result at  $p < 0.01$   
 NS Not significant  
 N/A Statistics not available

### c) Summary

Tables 6.3 and 6.4 indicate that where mothers and teachers agreed over ESN (M) children this tended to be when children were outside the home, e.g. travelling or playing outside. They did not rate the children as a group differently. When compared to Normal children both mothers and teachers felt Normal children more capable than ESN (M) children of travelling alone for distances over half an hour, and in the length of time they could be left alone at home. Mothers, however, felt ESN (M) children less capable than Normal children of any travelling by themselves, and this was reflected in the opportunity these children had for actually doing so. In addition, ESN (M) had less opportunity to belong to a local club, generally because of lack of facilities. Mothers did not see ESN (M) children as less self-sufficient than Normal children however.

Where it was possible to compare mothers' and teachers' assessments of Normal children there were no significant differences.

Thus, the significant differences in this section related to the status of the children (ESN (M) or Normal) rather than who made the assessments (mothers or teachers).

#### 6.4 3 Social Awareness

Questions on social awareness were divided into two sections: relationships and social sensitivity (See Table 6.5 and 6.6: and Appendices 6.12 to 6.21).

##### a) Relationships

###### People

While mothers and teachers did not agree about whether ESN (M) children had a close friend ( $\tau = -.16$ :  $N=19$ ) or whether they had many acquaintances ( $\tau = .12$ :  $N=19$ ), there was a similar lack of agreement between mothers and teachers of Normal children (Table 6.5). Ten ESN (M) and 14 Normal children were thought to have a close personal friend by their mothers; and 11 and 8 respectively by their teachers. The great majority of both ESN (M) and Normal children were seen as being popular (having a number of acquaintances) by both mothers and teachers.

Teachers tended to indicate that lack of close friendship was related to factors within the child (i.e. because of learning difficulties, personality etc.); and mothers of Normal children gave similar reasons. However, half the mothers of ESN (M) children indicated that children's learning problems might be the cause of difficulties their children had in making friends, and 3 felt that the reason was environmental (i.e. there were no other children suitable in the neighbourhood).

Despite this last fact, mothers felt Normal children were better able to make and keep friends than ESN (M) children ( $\tau = -.57$ :  $P<0.01$ :  $N=35$ ), a difference not seen by teachers ( $\tau = -.26$ :  $N=37$ ) (Appendix 6.12). Generally mothers thought ESN (M) children were fair or poor at maintaining friendships, while Normal children had good or very good skills. Even so mothers and teachers did not agree as to which ESN (M) or Normal children were

good at making and keeping friends (Table 6.5), although mothers' and teachers' ratings did not differ significantly for either group.

In terms of getting along with other people, mothers and teachers agreed only over which ESN (M) children got on well with unknown adults ( $\tau = .35$ ;  $P < 0.05$ ;  $N = 16$ ) (Appendix 6.14) ; and over which Normal children got on well with known adults ( $\tau .31$ ;  $P < 0.05$ ;  $N = 18$ ) (Appendix 6.13). The majority of children were seen to get on very well or well with adults they knew and with those whom they did not know, and neither mothers nor teachers saw any difference between the two groups of children.

There was no agreement between mothers and teachers over which ESN (M) or Normal children got on well with other children, either known or unknown (Appendix 6.15), although mothers and teachers did not rate ESN (M) differently as a group, nor the Normal children differently as a group. The majority of children were seen as being very good to fair at getting on with children they knew.

Mothers did not see a difference between the two groups of children, although teachers rated Normal children as being good at getting on with unknown children while the ESN (M) group were only fair - a significant difference ( $\tau = -.49$ ;  $P < 0.01$ ;  $N = 34$ ).

#### Animals

Two questions were asked about animals. Tables 6.5 and 6.6 show that there was no significant difference. [However, ESN (M) children had greater contact with animals at school than did Normal children ( $\tau = .33$ ;  $P < 0.01$ ;  $N = 34$ ), contrary to prediction. (See also Appendix 6.16.)] Animals were generally rabbits (one of which was allowed free to wander around the classroom and had a taste for observation notes !), guinea pigs and gold fish. This question was phrased in terms of having animals or pets in the classroom/school, and a number of teachers said they had no animals, but a classful of pets !

Despite greater access to animals, ESN (M) children were not rated as getting on better or worse than Normal children with animals by their mothers ( $\tau = 0.10$ ), and mothers and teachers did not agree which ESN (M) or Normal children were good with animals and which were not.



Table 6.5 Summary of mothers' and teachers' ratings on social awareness

No.	Questions	Mothers v. Teachers							
		ESN(M) CHILDREN				NORMAL CHILDREN			
		N	Tau	Wilc.	M/T	N	Tau	Wilc.	M/T
<u>SOCIAL AWARENESS</u>									
<u>Relationships</u>									
28a	Has a close friend	19	-.16	-	-	17	-.27	-	-
29a	Has acquaintaintances	19	.12	-	-	18	-.03	-	-
29c	Ability to keep friends	17	-.10	-1.07	NS	18	-.05	-0.84	NS
30c	Gets on with known adults	19	.24	-1.08	NS	18	.31*	-1.60	NS
31c	Gets on with unknown ads.	16	.35*	0.14	NS	18	.17	-0.91	NS
32c	Gets on with known childn	19	-.32	0.34	NS	18	.18	-0.22	NS
33c	Gets on with unknown ch.	18	-.15	-1.04	NS	15	-.11	-1.16	NS
34a	Has animals/pets	18	.11	-	-	16	-.16	-	-
34c	Gets on with animals	17	.07	0.21	NS	8	0	-1.18	NS
35a	Interest in opposite sex	18	-.07	-	-	17	.30	-	-
36a	Has boy/girl friend	17	-.08	-	-	15	.45**	-	-
38a	Knowledge of sex	18	.33**	-	-		N/A	-	-
38c	Understanding of sex	13	.39*	-2.67#	M	13	.21	-0.49	NS
<u>Social Sensitivity</u>									
39c	Cooperates with others	19	.24	-1.07	NS	18	.17	-0.12	NS
40c	Interrupts	19	.46**	-.66	NS	18	-.23	-1.25	NS
41c	Other's feelings to self	19	.34*	-3.18#	M	18	.13	-0.24	NS
42c	Judging other's feelings	16	.41*	-1.29	NS	14	.03	-1.02	NS
43c	Sensitivity to others	17	.25	-0.51	NS	16	0	-0.31	NS
44c	Takes turns and shares	19	.24	-1.07	NS	18	.27	-1.02	NS

Key: M/T: Mother (M) or Teacher (T) rates children more competent

\* Significant result at  $p < 0.05$

\*\* Significant result at  $p < 0.01$

NS Not significant

N/A Statistics not available

# Significance in opposite direction to prediction

Table 6.6 Summary of mothers' and teachers' ratings on social awareness

No.	Questions	ESN(M) v. Normal Children					
		MOTHERS' ASSESSMENTS			TEACHERS' ASSESSMENTS		
		<u>N</u>	<u>Tau</u>	<u>E/N</u>	<u>N</u>	<u>Tau</u>	<u>E/N</u>
<u>SOCIAL AWARENESS</u>							
<u>Relationships</u>							
28a	Has close friend	37	-.25	NS	36	.11	NS
29a	Has acquaintances	37	-.15	NS	37	.01	NS
29c	Ability to keep friends	35	-.57**	N	35	-.26	NS
30c	Gets on with known adults	37	-.15	NS	37	-.11	NS
31c	Gets on with unknown ads.	35	-.20	NS	36	-.25	NS
32c	Gets on with known childn	37	.01	NS	37	-.11	NS
33c	Gets on with unknown ch.	36	-.21	NS	34	-.49**	N
34a	Has animals/pets	37	-.14	NS	34	.33#	E
34c	Gets on with animals	37	-.10	NS	35	.30	NS
35a	Interest in opposite sex	37	-.19	NS	35	.14	NS
36a	Has boy/girl friend	36	-.19	NS	32	-.02	NS
37a	Dating	27	-.14	NS		-	-
38a	Knowledge of sex	36	-.10	NS	34	-.17	NS
38c	Understanding of sex	34	-.38*	N	28	-.63**	N
<u>Social sensitivity</u>							
39c	Cooperates with others	37	.01	NS	37	-.23	NS
40c	Interrupts	37	.11	NS	37	-.26	NS
41c	Other's feelings to self	37	.06	NS	37	-.50**	N
42c	Judging other's feelings	31	.24	NS	37	-.31*	N
43c	Sensitivity to others	36	-.26	NS	34	-.07	NS
44c	Takes turns and shares	37	-.13	NS	37	-.16	NS

Key: E/N: ESN(M) or Normal (N) children are seen as more competent

\* Significant result at  $p < 0.05$

\*\* Significant result at  $p < 0.01$

NS Not significant

N/A Statistics not available

# Significance in opposite direction to prediction

#### Relationships with the opposite sex

Mothers and teachers did not agree over which ESN (M) children were interested in the opposite sex ( $\tau = -.07$ ;  $P=0.37$ ;  $N=18$ ). Of these children there were only three occasions when mothers and teachers agreed they were interested, and 5 when they agreed the children were not. Similarly there was no agreement over Normal children ( $\tau = -.30$ ;  $P=0.11$ ;  $N=17$ ), with 5 children being seen as interested and 6 as not by both mothers and teachers. Reasons for lack of interest varied, but frequently both mothers and teachers said they did not know.

The majority of children (see Appendix 6.17) did not have a boy/girlfriend. There was agreement between mothers and teachers only

over which Normal children had boy/girlfriends and which did not ( $\tau = .45$ :  $P < 0.01$ :  $N = 15$ ). Normal children did not date more frequently than ESN (M) children, and reasons given for this were the children were too young or the area in which they lived was not safe at night.

Mothers and teachers agreed as to which ESN (M) children knew about sex and which did not ( $\tau = -.33$ :  $P < 0.01$ :  $N = 18$ ). Only 5 children were seen as having some knowledge of sex by both mothers and teachers. Fourteen of the Normal children were assessed as knowing about sex by mothers, and 16 by teachers. However, neither mothers nor teachers assessed Normal children as being more knowledgeable than ESN (M) children (Table 6.6).

When it came to children's understanding of sex (Appendix 6.18), rather than just knowing about it, again mothers and teachers agreed over which ESN (M) children had greater understanding than others ( $\tau = .39$ :  $P < 0.05$ :  $N = 13$ ). [Contrary to the prediction, however, mothers rated the children as having a greater understanding than did teachers ( $Z = -2.67$ :  $P < 0.01$ :  $N = 13$ ).] There was no such agreement over Normal children. However, both mothers ( $\tau = -.38$ :  $P < 0.05$ :  $N = 34$ ) and teachers ( $\tau = -.63$ :  $P < 0.01$ :  $N = 28$ ) rated Normal children as having a better understanding of sex than ESN (M) children.

#### b) Social Sensitivity

As well as asking how children got on with people, mothers and teachers were also asked about the children's sensitivity to others in social situations.

Mothers and teachers did not agree about which ESN (M) children were most co-operative, which were most sensitive towards others's needs and feelings and which had a better understanding of taking turns and sharing. However, they did agree over which ESN (M) children interrupted least ( $\tau = .46$ :  $P < 0.01$ :  $N = 19$ ) (Appendix 6.18); children's sensitivity about other people's feelings towards themselves ( $\tau = .34$ :  $P < 0.05$ :  $N = 19$ ) (Appendix 6.20); and their accuracy in judging others' feelings about themselves ( $\tau = .41$ :  $P < 0.05$ :  $N = 16$ ) (Appendix 6.21). For the Normal group of children there was no such agreement with regard to any of the items relating to social sensitivity.

Looking at differences between mothers' and teachers' ratings of the children as a group, there were no significant differences for Normal children. [It had been hypothesized that mothers would rate ESN (M) children as less sensitive than did teachers. Contrary to this prediction mothers rated their ESN (M) children generally as very sensitive to others' feelings about themselves while teachers rated them as sensitive, a significant difference ( $Z = -3.18$ ;  $P < 0.01$ ;  $N = 19$ ) (Appendix 6.20).] There were no other differences.

Table 6.6 shows that mothers did not see any difference between ESN (M) and Normal children in any of the skills in this section. Teachers rated Normal children as being more accurate in judging others' feelings than ESN (M) children, e.g. good as compared to fair ( $\tau = -.50$ ;  $P < 0.01$ ;  $N = 37$ ; and as being more sensitive towards others' feelings ( $\tau = -.31$ ;  $P < 0.05$ ;  $N = 34$ ).

#### c) Summary

Mothers and teachers agreed about which ESN (M) children got on better with unknown adults, their knowledge and understanding of sex, which ESN (M) children interrupted more frequently, and children's sensitivity and accuracy of others' feelings towards themselves. For the Normal group of children mothers and teachers agreed only about which children got on well with adults and who had boy/girl friends.

Teachers' ratings of the Normal children did not differ significantly from mothers' ratings for any question in this section. Mothers only significantly differed from teachers over ESN (M) children's understanding of sex and in the children's sensitivity. In both cases, contrary to prediction, mothers rated the children as a group as more skilled than did teachers.

When it came to comparisons between the two groups of children, mothers did not see any differences in terms of social sensitivity, although teachers perceived Normal children as being both more sensitive and accurate in judging other people's feelings. Despite this, Normal children were not generally rated as more competent in relationships than ESN (M) children, except in their understanding of sex. In addition, mothers felt Normal children were able to maintain friendships better than ESN (M) peers, while teachers perceived Normal children as better able to get on with unknown children than the ESN (M) group.

#### 6.4.4 Unexpected or Crisis Situations

Having to cope with a crisis or deal with the unexpected is more likely to occur as we grow older. It was hypothesized that Normal children would generally be seen to cope better in these situations and that mothers on the whole would rate their children as less competent than would teachers, particularly ESN (M) children. The hypotheses were only partially confirmed. See Tables 6.7 and 6.8 and Appendices 6.22 to 6.29.

##### a) Personal Crises

Children's ability to work out minor practical problems for themselves involved looking for something that was missing and opening difficult containers etc. All children were seen as needing no, or only a little help, and there were no significant differences between mothers' and teachers' assessments for the two groups as a whole (Appendix 6.22). At the same time mothers and teachers did not agree over which children were more competent at overcoming such problems and which were not. However, teachers rated Normal children as more competent than ESN (M) children ( $\tau = -.37$ :  $P < 0.05$ :  $N=37$ ).

A number of questions were asked which related to children's ability to cope with what might be termed psychologically stressful situations - failing in a task, not getting one's way, disappointment and being criticised or told off. Table 6.7 illustrates that mothers and teachers agreed only on one of these items for ESN (M) children - ability to cope with failure ( $\tau = .41$ :  $P < 0.05$ :  $N=19$ ). In general they felt ESN (M) children coped from fair to good. However they did not rate the children differently as a group. There were no such differences in mother and teacher ratings of Normal children ( $\tau = .04$ :  $N=17$ ), and neither mothers nor teachers rated the two groups of children differently.

In addition, raters were asked to indicate what kind of behaviour children displayed when they failed. Appendix 6.23 shows that for both groups of children mothers reported that nearly half ( $N=15$ ) lost their temper, and as many again became anxious ( $N=8$ ) or tried again ( $N=8$ ). In the classroom children were reported to behave slightly differently, either needing encouragement ( $N=15$ ) or trying again spontaneously ( $N=9$ ).

Mothers and teachers did not agree which ESN (M) children coped well with not having their own way ( $\tau = .12$ :  $N=19$ ), both rating the group generally as coping from well to poor. Normal children were rated as coping better by their teachers than by their mothers ( $Z = -2.16$ :  $P<0.05$ :  $N=17$ ), and there was no agreement over which children coped well and which did not. Those children who coped poorly were generally reported to lose their temper or have a fit of the sulks.

There was no agreement between mothers' and teachers' ratings of which ESN (M) children were able to cope with disappointment, although the way they rated the children generally did not differ (Appendix 6.24). In contrast, mothers and teachers agreed over which Normal children were able to cope ( $\tau = .52$ :  $P<0.01$ :  $N=16$ ), but they also differed significantly in how they rated Normal children as a group ( $Z = -2.71$ :  $P<0.01$ :  $N=17$ ), teachers seeing children as very good or good at coping with disappointment, and mothers placing the majority of children between good and poor. Mothers made no distinction between ESN (M) and Normal children's behaviour, but teachers felt Normal children coped better ( $\tau = -.65$ :  $P<0.01$ :  $N=35$ ).

Finally, looking at what I have termed as psychologically stressful situations, questions were asked about children's ability to cope with criticism. There was no agreement between mothers and teachers over which children coped well and which did not for either group, nor did mothers and teachers rate the same group differently. However, mothers saw Normal children as coping from well to fairly well with criticism, compared to fair to poor for ESN (M) children - a significant difference ( $\tau = -.31$ :  $P<0.05$ :  $N=37$ ) (Appendix 6.25). Teachers saw no difference.

Appendix 6.26 shows the types of behaviours children displayed when they could not handle criticism well. Mothers reported children tended to lose their temper ( $N=8$ ) or sulk ( $N=9$ ), and a few withdrew ( $N=4$ ) or became anxious ( $N=2$ ). Teachers reported children sulked ( $N=8$ ), lost their temper ( $N=3$ ) or withdrew ( $N=3$ ).

The last question in this section dealt with obedience. There was no agreement between mothers and teachers as to which children were more likely to do as they were asked and which would not for

either group of children. Mothers did not rate the two groups of children differently 26) nor did they differ significantly in their ratings compared to those of teachers in connection with ESN (M) children, the majority being seen as always or at least sometimes doing as they were told. Teachers, however, rated most Normal children as always obedient, significantly more obedient than mothers' ratings ( $Z = -2.49$ :  $P < 0.01$ :  $N = 18$ ). In addition, teachers saw Normal children as more obedient than ESN (M) children ( $\tau = -.32$ :  $P < 0.05$ :  $N = 37$ ) (Appendix 6.27).

b) Social Crises

This section covered questions about remaining calm when separated from adults on an outing, dealing with an emergency or minor incident and the ability to use the telephone.

A small but perhaps important aspect of being able to deal with a social crisis is the ability to use a telephone in order to call for help. Mothers reported that 16 ESN (M) and 17 Normal children were able to use the telephone.

Appendix 6.28 shows that there was no agreement between mothers and teachers ratings of which ESN (M) or Normal children were able to cope if they became separated from adults when on an outing, nor did their rating of the same group differ significantly. The majority of ESN (M) and Normal children were seen to cope very well or well, although a number of ESN (M) children were seen to cope from fair to very poorly. Mothers saw no difference between the groups, but teachers rated Normal children as more competent ( $\tau = -.35$ :  $P < 0.05$ :  $N = 36$ ).

In dealing with a minor incident such as someone falling over, cutting a finger, spilling liquid or breaking something etc., mothers and teachers of ESN (M) children agreed as to which children would be able to cope best ( $\tau = .40$ :  $P < 0.05$ :  $N = 19$ ). There was no difference in how these children were rated as a group (Appendix 6.29). On average they were seen to deal with such incidents well.

Few teachers knew if children had been involved in an emergency so their results were not analysed. In fact, few children had as reported by their mothers, Normal children being involved more

frequently (N=6) than ESN (M) children (N=1) ( $\tau = -.28$ ;  $P < 0.05$ ; N=37).

c) Summary

In this section mothers and teachers rarely agreed over which children were better able to deal with crises than others. For the ESN (M) group, there was agreement over children's ability to cope with failure and deal with a minor incident. For the Normal group, mothers and teachers agreed only over children's ability to cope with disappointment. There were no differences between mothers' and teachers' ratings of ESN (M) children as a group for any item; but teachers rated Normal children more highly than did mothers in coping with not having their own way and disappointment, and doing as they were asked.

Where comparisons were made between the two groups of children, mothers twice rated Normal children as more competent than ESN (M) children. Teachers rated them better on four different items.

Bearing in mind the general results from the first major section, Practical Self Care, it may be remembered that it was suggested that mothers saw ESN (M) children as needing more protection and help on those occasions when there was some degree of danger. The section on Autonomy had shown that ESN (M) children travelled alone less often and were thought less competent of doing so. This protection may lead to ESN (M) being less likely to be in a situation where they, rather than someone else, has to deal with an emergency. Conversely, as they were seen as less competent, they might be prevented from being in situations where emergencies etc. may occur.

Poor behaviour displayed in situations termed as personal crises was generally described as children losing their temper or sulking by mothers, but occasionally as becoming anxious and needing encouragement by teachers.



Table 6.7 Summary of mothers' and teachers' ratings on unexpected or crisis situations

No.	Questions	Mothers v. Teachers							
		ESN(M) CHILDREN				NORMAL CHILDREN			
		<u>N</u>	<u>Tau</u>	<u>Wilc.</u>	<u>M/T</u>	<u>N</u>	<u>Tau</u>	<u>Wilc.</u>	<u>M/T</u>
<u>UNEXPECTED OR CRISIS SITUATIONS</u>									
<u>Personal crises</u>									
45c	Overcomes practical probs.	19	.21	-0.35	NS	18	.18	-1.51	NS
46c	Copes with failure	19	.41*	-1.02	NS	17	.04	-0.11	NS
47c	Not having own way	19	.12	-1.82	NS	17	-.16	-2.16*	T
48c	Copes with disappointment	19	.07	-0.10	NS	16	.52**	-2.71**	T
49c	Copes with criticism	19	.03	-1.19	NS	18	-.11	-0.94	NS
50d	Does as asked	19	.28	-1.22	NS	18	.32	-2.49**	T
<u>Social situations</u>									
51c	Calmness when separated	19	.22	-0.66	NS	17	.04	-1.18	NS
52c	Copes with minor incident	19	.39*	-1.21	NS	17	-.03	-0.62	NS
54a	Uses the telephone	14	-.04	-	-		N/A		

Key: M/T: Mother (M) or Teacher (T) rates children more competent

\* Significant result at  $p < 0.05$

\*\* Significant result at  $p < 0.01$

NS Not significant

N/A Statistics not available

Table 6.8 Summary of mothers' and teachers' ratings on unexpected or crisis situations

No.	Questions	ESN(M) v. Normal Children					
		MOTHERS' ASSESSMENTS			TEACHERS' ASSESSMENTS		
		N	Tau	E/N	N	Tau	E/N
<u>UNEXPECTED OR CRISIS SITUATIONS</u>							
<u>Personal crises</u>							
45c	Overcomes practical probs.	37	-.21	NS	37	-.37*	N
46c	Copes with failure	37	-.23	NS	36	-.18	NS
47c	Not having own way	37	-.19	NS	36	-.25	NS
48c	Copes with disappointment	25	-.20	NS	35	-.65**	N
49c	Copes with criticism	37	-.31*	N	37	-.26	NS
50d	Does as asked	37	-.10	NS	37	-.32*	N
<u>Social situations</u>							
51c	Calmness when separated	37	-.24	NS	36	-.35*	N
52c	Copes with minor incident	37	-.09	NS	36	-.23	NS
53a	Experience of emergency	37	-.28*	N		N/A	-
54a	Uses the telephone	37	-.10	NS	29	-.07	NS

Key: E/N: ESN(M) or Normal (N) children are seen as more competent  
 \* Significant result at  $p < 0.05$   
 \*\* Significant result at  $p < 0.01$   
 NS Not significant  
 N/A Statistics not available

#### 6.4.5 Occupation

The final section of the questionnaire covered a few questions which might indicate the children's competency in skills which would be useful in the future occupation. See Tables 6.9 and 6.10 and Appendices 6.30 to 6.35.

##### a) General Alertness and Interest

In terms of children's general interest in other people or curiosity over anything new, there were no significant results. The majority of ESN (M) and Normal children were considered generally interested in other people (ESN (M)=17: Normal=14) and curious about anything new (ESN (M)=16: Normal =17).

Two questions were also asked about children's interest in the news, i.e. whether they ever looked at a newspaper, listened to or watched the radio or television news; and how genuinely interested they seemed. As Appendix 6.30 shows, the great majority of children were said either to look at a newspaper or watch the news

on television, although mothers and teachers did not agree which children followed the news and which did not. Teachers believed more Normal children took an interest in the news than ESN (M) children ( $\tau = -.32$ :  $P < 0.05$ :  $N = 33$ ), but not that they were necessarily more interested. Mothers, however, rated Normal children as showing greater interest than their ESN (M) peers ( $\tau = -.35$ :  $P < 0.05$ :  $N = 36$ ). It might, therefore, appear that although both groups of children show equal curiosity, the field of interest is wider for the Normal group.

#### b) Work Skills

There was no agreement between mothers and teachers as to which ESN (M) or Normal children needed more praise or approval than others, neither did their ratings differ significantly. However, mothers and teachers agreed over their assessments of ESN (M) ( $\tau = .47$ :  $P < 0.01$ :  $N = 19$ ) and Normal ( $\tau = .50$ :  $P < 0.01$ :  $N = 19$ ) children's ability to concentrate (Appendix 6.31); and there was also agreement between mothers and teachers as to which ESN (M) children were capable of organising themselves ( $\tau = .43$ :  $P < 0.05$ :  $N = 19$ ) (Appendix 6.32).

In all three questions about work skills, teachers saw Normal children as significantly more competent than ESN (M) children. They were seen to need less praise, encouragement or approval in order to complete a task ( $\tau = -.35$ :  $P < 0.05$ :  $N = 37$ ), being assessed as needing little or only some praise from time to time, while ESN (M) children were seen as needing some help from time to

#### c) Future Plans

There was no significant difference between the frequency with which teachers had talked or listened to ESN (M) or Normal children about the children's future plans. Teachers reported they had talked to 10 children sometimes about what they were going to do in the future (ESN = 6: Normal = 4); but 11 ESN (M) and 10 Normal had never discussed their future plans with their teachers at all. Mothers reported that both groups had talked more about this. Only 6 had never discussed the future with ESN (M) children, and 5 with Normal children.

Although, of course, these children were generally not due to leave school for some years (mean age = 13.6 years [ESN] and 13 years [Normal]), the lack of discussion, particularly with the

teachers, was perhaps a little surprising. Appendix 6.33 gives a breakdown of the reasons given by both teachers and mothers. It will be seen that mothers did not give particularly different reasons, tending to consider lack of discussion normal for children of that age (i.e. they were too young to think a lot about it). Only two considered that discussion was inappropriate because the child had learning difficulties.

In contrast, teachers indicated that for 8 of the 11 ESN (M) children the reason was attributable to the child's learning difficulties. For the remainder it was considered normal for children of their age. Teachers of Normal children generally said there was no time in their classes (a number of teachers were not the child's form teacher), and two said that children had not yet received careers counselling, but that they would further up the school. In one instance the teacher remarked that child knew there was little or no hope of employment locally and so felt there was no point in talking about what he was going to do when he left school. In fact, the majority of reasons given why there had been no discussion about the future could be seen as particularly good reasons for discussing it.

If mothers and teachers knew what children had talked about doing, their employment aspirations were coded according to socio-economic class (as categorised by: The classification of Occupations, 1980). Appendices 6.34 and 6.35 respectively give the children's aspirations and mothers' assessments of the realism of their children's plans. It will be seen that 6 of the 10 Normal children were reported to talk of jobs in SEC 2, compared to only 3 ESN (M) children. On the other hand, 6 of the ESN (M) children talked about jobs in SEC 4. Only one child talked of her plans to get a job in SEC 1 - an ESN (M) girl who wanted to be a vet. The trend for ESN (M) children to talk most frequently of jobs in SEC 4 and Normal children to talk about jobs in SEC 2 was also shown in the teachers' reports.

With regard to how realistic children's plans were, mothers saw ESN (M) as significantly less realistic than Normal children ( $\tau = -.57$ ;  $P < 0.01$ ;  $N = 23$ ). Teachers' scores were so infrequent that no statistics were computed.

d) Summary

Mothers and children did not differ in how they rated either ESN (M) (or Normal) children as a group in any question in this section. At the same time, they only agreed over which ESN (M) and Normal children were able to concentrate and which ESN (M) children were able to organise themselves.

However, both mothers and teachers rated Normal children as more competent on a number, although never on the same, questions. Thus mothers saw Normal children as more interested in the news. Teachers felt more Normal children were interested in the news and were more competent in each of the areas considered.

Knowledge about children's future plans was somewhat scant. Mothers and teachers did not agree on the frequency with which the topic was discussed, which was remarkably low at school. Mothers rated Normal children as more realistic than ESN (M) children, and tended to report Normal children's aspirations were for middle class as opposed to working class jobs. It should be remembered that as more Normal than ESN (M) children came from middle class homes, this finding may merely reflect children's aspirations to work in similar professions as their parents.

Table 6.9 Summary of mothers' and teachers' ratings on occupation

No.	Questions	Mothers v. Teachers							
		ESN(M) CHILDREN				NORMAL CHILDREN			
		N	Tau	Wilc.	M/T	N	Tau	Wilc.	M/T
<u>OCCUPATION</u>									
<u>General alertness and interest</u>									
	55c Interest in other people	19	.04	-0.20	NS	17	.11	-1.69	NS
	56c General curiosity	18	-.27*	-1.48	NS	18	-.07	-1.43	NS
	57a Interest in news	18	.32*	-	-	15	-.02	-	-
	57c Level of interest in news	16	.04	-1.19	NS	15	-.02	-1.01	NS
<u>Work skills</u>									
	58c Need of praise/approval	18	.12	-0.59	NS	18	-.19	-0.21	NS
	59c Ability to concentrate	19	.47**	0	NS	18	.50**	-1.72	NS
	60c Ability to organise self	19	.42*	-1.16	NS	18	.09	-0.98	NS
<u>Future plans</u>									
	61a Discusses future plans	19	.13	-1.88	NS	18	.08	-1.29	NS

Key: M/T: Mother (M) or Teacher (T) rates children more competent

\* Significant result at  $p < 0.05$

\*\* Significant result at  $p < 0.01$

NS Not significant

N/A Statistics not available

Table 6.10 Summary of mothers' and teachers' ratings on social awareness

No. Questions	ESN(M) v. Normal Children					
	MOTHERS' ASSESSMENTS			TEACHERS' ASSESSMENTS		
	N	Tau	E/N	N	Tau	E/N
<u>OCCUPATION</u>						
<u>General alertness and interest</u>						
55c Interest in other people	36	.29	NS	37	.93	NS
56c General curiosity	36	.07	NS	37	-.16	NS
57a Interest in news	37	-.10	NS	33	-.32*	N
57c Level of interest in news	36	-.35*	N	32	-.29	NS
<u>Work skills</u>						
58c Need of praise/approval	36	-.14	NS	37	-.36*	N
59c Ability to concentrate	37	-.13	NS	37	-.42**	N
60c Ability to organise self	37	.06	NS	37	-.37*	N
<u>Future plans</u>						
61a Discusses future plans	37	.09	NS	37	-.02	NS
62c Realism of future plans	23	-.57**	N	11	-.36	NS

Key: E/N: ESN(M) or Normal (N) children are seen as more competent  
 \* Significant result at  $p < 0.05$   
 \*\* Significant result at  $p < 0.01$   
 NS Not significant  
 N/A Statistics not available

#### 6.5 Reasons for Non-Occurrence

In the main results, I have commented once or twice on the reasons given by parents or teachers of both ESN (M) and Normal children as to why children do not do certain things. To get an overview of the main reasons that were given, the number of times mothers and teachers, as groups, gave a particular reason were counted. Table 6.11 gives a breakdown.

TABLE 6.11

THE NUMBER OF TIMES EACH REASON WAS GIVEN BY MOTHERS AND TEACHERS  
OF ESN (M) AND NORMAL CHILDREN

REASON	ESN (M) CHILDREN		NORMAL CHILDREN	
	Mothers	Teachers	Mothers	Teachers
Learning Difficulty	68	42	9	1
Normal	39	26	39	24
School/classroom	-	27	2	33
Mother/family	34	18	50	6
Social	49	3	20	3
Child's personality	16	8	34	28
Child's sex	7	-	1	-
TOTAL	213	124	155	95

The reasons were as follows:

- 1) Learning Difficulty: Mothers or teachers felt that the because the child was ESN (M) he/she was unable to do something and that this was typical of ESN (M), as opposed to Normal children.
- 2) Normal: It was felt that this was normal for a child of this age.
- 3) School: There was no opportunity at the school; the teacher did not arrange the class in such a way to provide the opportunity; or this was against school policy (e.g. having animals in the classrooms).
- 4) Family: The mother expressed worry so she did not allow a child do something, although she suspected he/she would be competent to do it; or the family was organised in such a way that no opportunity occurred.
- 5) Social: The area was unsafe (e.g. for anyone to go out alone in the evening); or there were no local facilities, or they were unsuitable.
- 6) Child's personality: This category was supplied with reluctance because it had been felt that it could mask other underlying reasons. However, it came up in the answers quite regularly enough for it to be considered. This reason was accepted only if mother (or teacher) thought a child did not do something which other children (either ESN (M) or Normal) might do generally when



they were at that age. For instance, the child was described as a loner, not like his brothers and sisters when they were his age.

7) Child's sex: Rarely used, and only ever by mothers. Generally this was given as a reason when boys did not help about the house.

TABLE 6.12

PERCENTAGE OF TOTAL RESPONSE FOR EACH REASON

REASON	ESN (M) CHILDREN		NORMAL CHILDREN	
	Mothers	Teachers	Mothers	Teachers
	%	%	%	%
Learning Difficulty	31.9	33.9	5.8	1.1
Normal	18.3	21.0	25.2	25.3
School/classroom	-	21.8	1.3	34.7
Mother/family	16.0	14.5	32.3	6.3
Social	23.0	2.4	12.9	3.2
Child's personality	7.5	6.5	21.9	29.5
Child's sex	3.3	-	.6	-
TOTAL	100	100	100	100

Table 6.11 gives the number of times mothers and teachers gave a specific reason for a child not doing something throughout the entire questionnaire. The greater incidence as a whole for mothers to give more reasons than teachers is in part accounted for because mothers were asked more questions. Mothers and teachers of ESN (M) children gave more reasons than mothers and teachers of Normal children, because ESN (M) children had less opportunity than Normal children to do various activities.

It is, therefore, more useful to look at Table 6.12 which gives the percentage which each reason contributed to the total number of responses.

There appears to be little difference between mothers and teachers of ESN (M) children giving the reason for non-occurrence as the child's learning difficulty (31.9% and 33.9% respectively). Thus they gave this reason one time in three when a child did not do something. The percentage of times they indicated that non-occurrence was because it was: a) normal for children of that age; b) for family reasons; and c) because of the child's personality

were also all essentially similar. The two areas where they appear to differ are when giving school as the reason (teachers: 21.8%; mothers never), or social reasons. In the latter case, mothers often argued that there was nowhere for the children to go to play, or there was no suitable club, or if there was, then it was not safe to go out in that area.

With regard to the Normal children, Table 6.12 shows a different pattern of responses. Because these children came from normal schools, parents and teachers rarely gave the reason that the child had a learning difficulty in any way if a behaviour did not occur. When they did, it generally indicated that mothers, or even more rarely teachers, had some concern about the child whom they felt behaved in a manner which was particularly unusual and worrying. The child's personality was given as a more frequent reason than for the ESN (M) children, and tended to counterbalance the proponderance of mothers and teachers of ESN (M) children who gave the child's learning difficulty as an answer. Adding the reasons which might be termed child specific (learning difficulty and personality), the percentage scores are as follows:

Mothers of ESN (M) children	38.4%
Teachers of ESN (M) children	39.4%
Mothers of Normal children	27.7%
Teachers of Normal children	30.6%.

As with the ESN (M) children, mothers gave school as the reason very rarely, but 34.7% of teachers' reasons were because the school or classroom organisation or facilities did not allow for certain opportunities to arise. About a third of the mothers indicated that they felt that if their child did not have the opportunity to do something this was due to the way in which the family was organised. This reason was rarely given by teachers. Mothers of Normal children also gave social reasons for non-occurrence more than teachers.

Kendall's tau was then applied to comparisons of mothers' (and teachers') answers for each of the seven reasons. The number of times each mother (or teacher) gave one reason were counted and the distribution of these were compared.

Mothers of ESN (M) and Normal children did not differ in the number of times they felt the reason was a) it was normal for a child of that age; b) school created no opportunity; and, c) it was normal for a child of that sex. As the ESN (M) group were older than the normal group of children (by 6 months) and as they had fewer opportunities than Normal children, the finding that mothers felt that lack of opportunity was age-appropriate suggests that mothers saw ESN (M) children as younger than their normal peers; and as will be seen in the next section, mothers, in fact, construed ESN (M) children most like younger children.

Mothers significantly differed over the number of times they gave the other four reasons.

Mothers of ESN (M) children, not surprisingly, gave the reason that their child had learning difficulties more frequently ( $\tau = -.81$ ;  $P < 0.01$ ) than did mothers of Normal children. Although just over 50% of mothers of ESN (M) children gave this reason two or three times in the questionnaire, one mother used this reason on ten separate occasions. On the other hand, mothers of Normal children said the child's personality accounted for non-occurrence of a behaviour more than mothers of ESN (M) children ( $\tau = .33$ ;  $P < 0.01$ ).

Mothers of ESN (M) children also considered the area in which they lived was unsafe or lacking in facilities more often than mothers of normal children ( $\tau = -.32$ ;  $P < 0.05$ ). Three gave this reason once, two gave it twice, two three and two gave it four times. Fourteen mothers of Normal children never gave this reason, and four used it only once.

However, mothers of Normal children said that it was their own or family policy which was the reason why children did not experience certain opportunities, significantly more than mothers of ESN (M) children ( $\tau = .37$ ;  $P < 0.05$ ). Eight mothers of ESN (M) children never used this reason, 6 used it once, and three used it twice. Only 3 mothers of Normal children never used it, and 13 used it between once and three times.

Teachers of ESN (M) children significantly gave the children's learning disability as a reason more often than teachers of Normal

children ( $\tau = -.65$ ;  $p < 0.01$ ), but this was counterbalanced by teachers of Normal children giving the child's personality as the reason more often than teachers of ESN (M) children ( $\tau = -.49$ ;  $p < 0.01$ ). They differed over no other reasons.

### Summary

The most noticeable difference in the types of reasons given for non-occurrence is that the child's learning disability was cited for the ESN (M) group significantly more often by mothers and teachers, but this was balanced by mothers and teachers of Normal children explaining non-occurrence in terms of the child's personality. This may appear to be an important difference, for if a mother (or teacher) of an ESN (M) child believes the child does not do something because he or she has a learning disability, as opposed to it being an aspect of his/her personality, it may be that the mother (or teacher) will deny the child the opportunity in future because she, the mother, believes this is part and parcel of the child's disability, thus closing some options for the child's further development.

### 6.6 Subsidiary Analyses

A selected number of questions were analysed to look at the effect of:

- a) The child's sex
- b) The child's age
- c) The child's S.E.C.
- d) Family size

on the mothers' and teachers' assessments. Individual tables of the few significant results are not given, but all results are summarised in Appendices 6.36 to 6.41.

#### 6.6.1 Child's Sex

There were 10 ESN (M) boys and 9 girls; and 9 Normal boys and 9 girls. Appendix 6.36 summarises the results of the analysis of mothers' answers for the effects of the child's sex. It was hypothesized that girls would in general be more frequently involved in and assessed as having greater competency in Practical/Self Care skills, having a close friend, and showing more interest in and involvement with the opposite sex. It was hypothesized that boys would have greater autonomy, going out more often and further from the home, and would have more general acquaintances than girls. They would also differ in their plans for the future.

It will be seen that there was only one significant difference between mothers' assessments of ESN (M) boys and girls - girls were seen as better able to deal with minor practical problems than boys ( $\tau = .55$ :  $p < 0.05$ ), as hypothesized. In no other areas were there any significant differences in mothers' assessments of ESN (M) boys and girls.

For the Normal group of children, there was a similar dearth of significant differences. Mothers again differed only in one instance, seeing girls as helping about the house more frequently than boys ( $\tau = .41$ :  $p < 0.05$ ). Apart from that, there were no other significant differences between mothers' assessments of Normal boys and girls.

In both instances, the single significant result could have occurred by chance (1 in 28), and thus the importance of children's sex affecting mothers' perceptions of various skills can be said to be negligible in the areas covered by these questions.

A number of teachers' assessments of ESN (M) and Normal children were also analysed for the effect of the child's sex. (See Appendix 6.37.)

Teachers saw ESN (M) girls as more competent at cooking without help than ESN (M) boys ( $\tau = .55$ :  $p < 0.05$ ), as hypothesized. There were no other significant differences with regard to the ESN (M) children.

As hypothesized, teachers saw Normal girls as more likely to have a close personal friend than boys. Boys were not seen as having more acquaintances generally than girls, as had been hypothesized. There were no other significant differences.

#### 6.6.2 Child's Age

It was hypothesized that older children (13 year 7 months and above) would be given greater opportunity and would be assessed as more competent than younger children (13 years 6 months and below). It was hypothesized that younger children would be more likely to belong to a club than older children, and do as they were told more often. It was also hypothesized that mothers would feel greater anxiety about leaving younger children alone in

the house; and that the children would differ in their various plans for the future. There were 10 older and 9 younger ESN (M) children and 5 older and 13 younger Normal children.

Appendix 6.38 shows that there was only one significant difference in the assessments of ESN (M) children - older children were more likely to have their own front door key than younger children. As there were no other significant results, this finding could have occurred by chance and should be accepted cautiously.

In the assessment by mothers of Normal children, there were 3 significant results. Older children were seen as being significantly more interested in the opposite sex, more likely to have a boy/girlfriend and coping better with disappointment, as hypothesized. There were no other significant results.

Results of the effect of children's age on the teachers' assessments can be found in Appendix 6.39. For the ESN (M) children there were 4 significant differences. Older ESN (M) children were seen as having greater competency in doing the shopping alone ( $\tau = -.62$ ;  $p < 0.05$ ), showing more interest in the opposite sex ( $\tau = -.44$ ;  $p < 0.05$ ), and more likely to know about sex and have a better understanding of it ( $\tau = -.33$ ):  $\tau = -.48$ ;  $p < 0.05$ ) than ESN (M) children. There were no other significant differences.

For Normal children, teachers reported more older children had boy/girlfriends ( $\tau = -.43$ ;  $p < 0.05$ ). No other hypotheses were confirmed.

### 6.6.3 Child's S.E.C.

There were 15 working class and only 4 middle class ENS (M) children, as compared to 8 working class and 10 middle class Normal children. Nine questions asked of mothers (2 of teachers) were analysed to look at the effect of the child's S.E.C. (Appendix 6.40)

It was hypothesized that with regard to pocket money, children's thoughts about the future and the realism of their plans, mothers' (and teachers') assessments of middle and working class children would differ. With regard to those questions relating to autonomy, it was hypothesized that working class children would generally be given more freedom than middle class children.

For ESN (M) children, it will be seen that neither mothers nor teachers assessed any differences between middle and working class children on those questions asked. This was also true of teachers' assessments of Normal children. Two hypotheses were confirmed with regard to the results of mothers of Normal children. Middle class children went out more with their mothers in the evening than did working class children ( $\tau = .36; P < 0.05$ ). Middle and working class children also differed significantly in how much they talked about the future ( $\tau = .37; P < 0.05$ ).

#### 6.6.4 Family Size

The number of siblings was divided into three groups:

- a) Only children (no siblings) ESN = 2: Nor = 0
- b) One or two siblings ESN = 9: Nor = 9
- c) Three plus siblings ESN = 8: Nor = 8

It was hypothesized that children from larger families (3+) would do more about the house (including making hot drinks and cooking), would have better social skills in relationships with other children, know more about sex, understand better about taking turns, and cope better with not having their own way. It was hypothesized that only children would get on better with adults they knew than children in larger families, and would be more sensitive to others' opinions of them.

Assessments by mothers of ESN (M) children showed that there were no differences in 13 of the 14 questions. However, only children were assessed as being more sensitive of others' feelings towards them than children in larger families ( $\tau = .37; p < 0.05$ ), as hypothesized (Appendix 6.41). Teachers of ESN (M) children also rated only children as more sensitive than those in larger families ( $\tau = .49; p < 0.01$ ). Teachers also assessed ESN (M) children in larger families as more interested in the opposite sex than ESN (M) children in smaller families (as predicted) ( $\tau = .44; p < 0.05$ ). There were no other significant differences for ESN (M) children.

There was only one significant result in the assessments of Normal children from families of varying size, so this could have occurred by chance. Teachers, as hypothesized, assessed children from larger families as making and keeping friends significantly

better than Normal children from smaller families ( $\tau = .53$ ):  $p < 0.05$ ).

### 6.7 Summary of Questionnaire Results

In trying to draw the threads of the questionnaire together to give an overall view of mothers' and teachers' assessments of ESN (M) and Normal children, a number of points emerge.

6.7.1. It had been hypothesized that mothers and teachers would agree as to which ESN (M) children were competent in social and independence skills in the present questionnaire. This hypothesis was not generally confirmed. On the majority of occasions (40 of 58), there was no agreement between mothers' and teachers' assessments of children's competence. The areas where there was agreement were children's (a) tidiness; (b) relative competency with money and consequent opportunity to shop; (d) relationships with adults (but not children) and their understanding or lack of understanding of sex; (e) sensitivity and judgment of other's feelings; (f) ability to cope with failure and minor incidents; and (g) competency in certain work skills.

6.7.2. Despite the general finding that mothers and teachers did not agree which children were competent at certain skills, mothers and teachers rarely rated ESN (M) children as a group differently - on 3 occasions only. This was contrary to prediction. Areas where mothers and teachers significantly differed were over children's tidiness, where teachers rated children as needing less reminding than mothers, as predicted; and in terms of children's understanding of sex and their sensitivity to others where, contrary to prediction, mothers rated children as more competent. If one ignores the last two findings as they were contrary to prediction, the single significant difference could have occurred by chance, and should, therefore, be accepted with caution. In effect, the overall finding is that mothers did not rate (ESN (M) children as a group as less competent than did teachers for any of the social and independence skills considered in the present questionnaire.



6.7.3. Although there were relatively few occasions when mothers and teachers of ESN (M) children agreed as to which ESN (M) children were competent and which were not, for Normal children, mothers and teachers agreed even less frequently - only 5 times. They agreed over which children would be (a) more competent at shopping along; (b) get on well with adults and have a boy/girlfriend; (c) cope well with disappointment; and (d) concentrate well. Yet despite this lack of agreement, teachers rated Normal children as a group as more competent than did mothers on only 6 occasions. Normal children were rated as more competent by teachers than by their mothers in terms of (a) their tidiness; (b) their understanding of money; and (c) their ability to cope with not having their own way, with disappointment and in doing as they were asked.

6.7.4. The above results indicate that, when judging the same children as a group, mothers and teachers did not differ in their assessments, irrespective of whether children were ESN (M) or Normal. When it came to group differences, the major factor appeared to be whether the children were ESN (M) or Normal, not whether mothers or teachers were making the assessment. On 15 out of a possible 81 questions, mothers rated Normal children as having greater opportunity or as being more competent than ESN (M) children. Teachers saw Normal children as a group as having significantly greater opportunities or competence on 18 occasions, but there were only 6 occasions when mothers and teachers both rated Normal children as more competent than ESN (M) children. These areas were related to children's competence to handle money and shop alone; their need of help when cooking; their inability to travel for longer distances; and their understanding of sex.

Looking back to 6.7.1, it will be seen that it was in terms of handling money, shopping, travelling and understanding of sex that mothers and teachers tended to agree over ESN (M) children's competence. Linked with the above result, it appears that where mothers and teachers agree as to ESN (M) children's lack of competence as compared to Normal children, they may also agree as to which ESN (M) children are less competent than others. These skills involve either some element of danger (travelling alone), and/or the need to cope with complex information, or at least long

instructions. This links with the finding that where mothers and teachers gave reasons for ESN (M) children's non-occurrence of behaviour, they tended to cite children's learning difficulties as a major reason.

Areas where only mothers considered ESN (M) children as less competent than Normal children were (a) dressing without help; (b) the need to be reminded to carry out regular tasks; (c) the ability to keep friends; (d) the ability to cope with criticism; (e) their level of interest in the national news; and (f) their realism about the future. They had also experienced fewer opportunities to shop alone, belong to a club, or cope with an emergency than Normal children.

In contrast, only teachers felt that ESN (M) children were (a) in need of more reminding to keep tidy; (b) less able to get on with unknown children; (c) less sensitive and accurate in judging other people's feelings; (d) less able to cope with practical problems, disappointment, and getting separated when out; (e) in need of more praise and approval to complete tasks; and finally (f) less able to concentrate and organise themselves than Normal children.

6.7.5. I have already mentioned that the ESN (M) children's learning difficulties were often cited for reasons of non-occurrence of behaviour by both mothers and teachers. This was counterbalanced by mothers and teachers of Normal children, who gave personality as the reason almost as frequently as learning difficulties was given by mothers and teachers of ESN (M) children. Mothers of ESN (M) children also tended to blame lack of adequate or suitable facilities more often than did mothers of Normal children, who indicated that non-occurrence might be because of their own or family policy.

6.7.6. Results from the analysis for the effects of subsidiary factors on selected questions were few, and showed no real trends.

The overall picture that emerges is that there is only partial agreement between mothers and teachers of either ESN (M) or Normal children as to which children are competent at specific skills. In fact, mothers and teachers appeared to agree more frequently about ESN (M) than about Normal children. The major variable

which accounted for group differences was children's status, i.e. whether they were ESN (M) or Normal.

The next section examines the results from the repertory grids to look at mothers' and teachers' perception of children in terms of constructs relating to social maturity, and whether ESN (M) children are construed differently by mothers and teachers, if so how, and whether this is reflected in the group of Normal children.

## 7. RESULTS: REPERTORY GRIDS

### 7.1 Introduction

A repertory grid was completed by each mother and teacher in order to ascertain how they construed individual ESN (M) children in relation to a) other children (and 2 adults); and b) ten constructs which had been selected as varying aspects of social maturity.

It had been hypothesised that: a) mothers and teachers of ESN (M) children would construe the same ESN (M) children differently; and, b) mothers and teachers of Normal children would construe the same Normal children differently.

### 7.2 Analysis

#### 7.2.1 Main Results

##### a) SERIES Analysis

The SERIES program (already described) produces an average score for each element on each construct from a set of repertory grids. In this study, 19 grids completed by mothers of ESN (M) children (and 18 grids completed by mothers of Normal children) were reduced to form 2 grids, one for each of the two groups of mothers. Similarly, 19 grids completed by the teachers of the same ESN (M) children (and 18 grids completed by the teachers of the same Normal children) produced 2 grids, one each for the two groups of teachers.

##### b) INGRID Analysis

The INGRID program (described above in the Methodology section) was used to analyse the consensus or mean grids which had been created from the SERIES program. In all, four INGRID programs were run:

- 1) Mothers of ESN (M) children (Mothers - ESN Grid)
- 2) Teachers of ESN (M) children (Teachers - ESN Grid)
- 3) Mothers of Normal children (Mothers - N Grid)
- 4) Teachers of Normal children (Teachers - N Grid)

c) DELTA Analysis

As has already been explained in the Repertory Grid Methodology section, the DELTA program analyses the difference between two grids (in this case two average grids) with the same elements and constructs. The same ten constructs were supplied on each grid in the same order. The same element roles were supplied on each grid in the same order.

When considering the results in this analysis, a point to remember is that, although the element roles were held constant in each grid, mothers and teachers supplied the name of a child or adult who was suitable for each role. A mother/teacher pair of grids contained only one element who was actually the same person - the ESN (M) or Normal (target) child. The other nine pairs of elements were merely people whom the mother or teacher thought filled each of the nine roles. As such, it would be expected that analysis with the DELTA program might show closer similarity between the average mother and teacher construction of the same group of children, than their average constructs of the same type of children or adults, i.e. comparisons on the ESN (M) or Normal (target) children are repeated measures; for the other nine roles the comparisons are independent measures.

Four DELTA programs were run to compare the following average grids which had been produced by the SERIES programme:-

- 1) Mother - ESN Grid with Teacher - ESN Grid.
- 2) Mother - N Grid with Teacher - N Grid.
- 3) Mother - ESN Grid with Mother - N Grid.
- 4) Teacher - ESN Grid with Teacher - N Grid.

The Diagram produced from the figures in the Delta program may look similar to those drawn from the INGRID program. It is in fact different. Each DELTA diagram represents the size of the differences between the two average grids. The closer the elements and constructs are plotted to the centre of the axes of the two principal components, the greater the agreement between the two grids. The further each element or construct is plotted from the centre point, the greater the disagreement between the two grids on that particular element or construct. Total agreement between two grids would, therefore, result in a blank diagram.

### 7.2.2 Subsidiary Results

#### 1) Children's Sex

SERIES programs were run to obtain 8 average grids relating to the children's sex:

- a) Mothers of ESN (M) boys
- b) Mothers of ESN (M) girls
- c) Mothers of Normal boys
- d) Mothers of Normal girls
- e) Teachers of ESN (M) boys
- f) Teachers of ESN (M) girls
- g) Teachers of Normal boys
- h) Teachers of Normal girls

DELTA programs then analysed various pairs of these grids to see if children of different sex were construed differently by mothers and teachers

#### 2) Children's Socio-Economic Class

SERIES programs were run to obtain 8 average grids relating to the children's socio-economic class:-

- a) Mothers of working class ESN (M) children
- b) Mothers of middle class ESN (M) children
- c) Mothers of working class Normal children
- d) Mothers of middle class Normal children
- e) Teachers of working class ESN (M) children
- f) Teachers of middle class ESN (M) children
- g) Teachers of working class Normal children
- h) Teachers of middle class Normal children

DELTA programs then analysed all possible pairs of these grids to see if children from different S.E.C. were construed differently by mothers and teachers.

### 7.2.3 Description of Analysis

#### INGRID

The INGRID program analyses a repertory grid to include a principal component analysis. The analysis assumes that a given number of elements can be pin-pointed in a multi-dimensional space produced by a given number of bi-polar constructs. Although nine components are extracted (n constructs - 1), it is usually the

first and second and maybe the third which account for the great majority of the variations in the grid. In this thesis, the two main components will be discussed only in the INGRID program (Beail, 1985). Using the two principal components, it is possible to draw a map of the component space in two-dimensional terms.

The INGRID analysis gives a number of different results. Those which will be discussed here are as follows:

1) The Structure of the Component Space

The extent to which each construct contributed to the total variation in the grid, and the correlations between constructs.

2) The Relevance of the Component Space to the Elements

a) The correlations between the constructs and ESN (M) (or Normal) children.

b) The extent to which the elements contributed to the total variation in the grid.

c) The distance between the ESN (M) children and other elements.

### 7.3 Mothers of ESN (M) CHILDREN

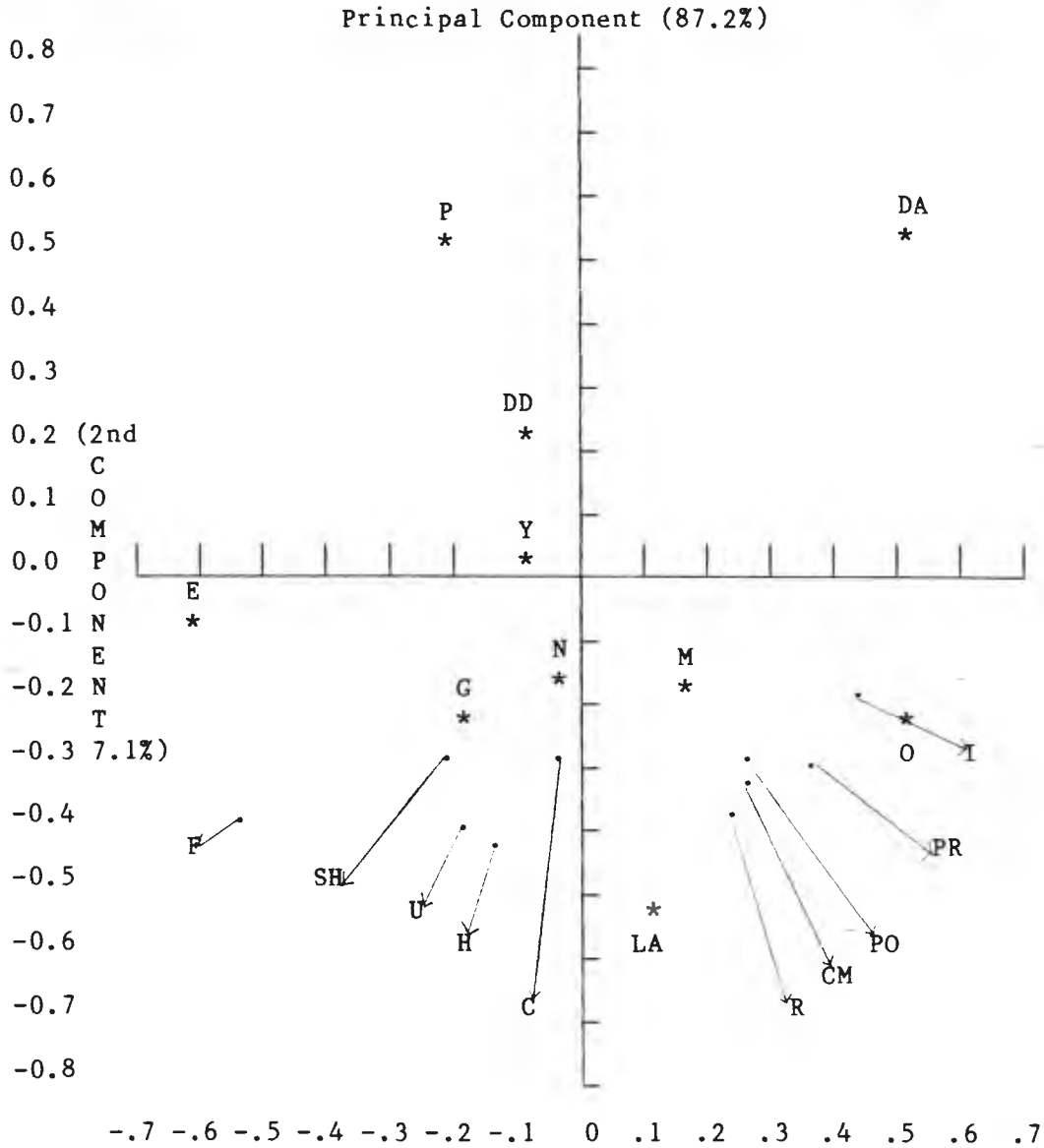
#### 7.3.1 The Structure of the Component Space

Figure 7.01 is the figure which can be drawn from the INGRID analysis of the Mothers - ESN Grid, using the two principal components derived from the ten constructs in the grid. Component 1 can be seen to make up 87.23 % and component 2, 5.74 % of the component space. Although Figure 7.01 represents only these two dimensions in the Mothers - ESN Grid, the other seven dimensions comprise a mere 7.1 %. Hence, the map gives a fairly accurate picture of the mothers' component space (using these constructs), although it must be emphasised that it is only approximate.

It is possible to plot the scores for all ten constructs and elements along the two principal components.

FIGURE 7.01

ELEMENTS AND CONSTRUCTS FROM THE MOTHERS - ESN GRID PLOTTED ALONG THE TWO PRINCIPAL COMPONENTS FROM THE INGRID PROGRAMME



KEY:	ELEMENTS (*)	CONSTRUCTS (->)
E	ESN (M) child	CM Can make up own mind
N	Normal child	H Helpful
O	Older child	F Friendly
Y	Younger child	R Responsible
DD	Dare Devil child	I Independent
G	Good child	C Calm
LA	Liked Adult	SH Sense of Humour
P	Problem child	PO Positive
M	Mature child	U Understanding
DA	Disliked adult	PR Practical

The figure shows that there appear to be two major groupings of constructs, those on the left of the vertical pole (Friendly,



Understanding, Sense of humour, Helpful and Calm) and those on the right of the vertical pole (Responsible, Can make up own mind, Positive, Practical and Independent), suggesting two major aspects of maturity for mothers. It will be seen that Problem, Dare Devil and Younger children fall (at varying distances) in the opposite sector of the map, suggesting that mothers see these children as immature in terms of both dimensions. ESN (M) children are closer to the friendlier group of constructs, but opposite to the more independent, responsible group of constructs. In contrast, disliked adults are in the sector opposite to the friendly group of constructs and orthogonal to the independent group. With the Liked Adult lying squarely between the positive aspects of the friendly and independent groups, it appears from this map that mothers of ESN (M) children tend to like people who are mature in terms of both groups of constructs, and dislike those who are immature, particularly those who are unfriendly.

a) The extent to which each construct contributed to the total variation in the grid, and the constructs' relationship to each other

Table 7.1 shows the correlations between each of the constructs.

TABLE 7.1

CORRELATIONS BETWEEN CONSTRUCTS IN THE MOTHERS - ESN GRID  
AND PERCENTAGES OF THE TOTAL VARIATION TO WHICH EACH CONSTRUCT  
CONTRIBUTED

<u>CONSTRUCTS</u>	1	2	3	4	5	6	7	8	9	10	%
1 Can Make up Own Mind	-	.91	.81	.93	.88	.83	.85	.89	.88	.89	8.8
2 Helpful		-	.94	.94	.73	.87	.87	.78	.96	.83	15.0
3 Friendly			-	.83	.59	.90	.90	.72	.95	.75	13.0
4 Responsible				-	.86	.88	.74	.79	.92	.94	11.5
5 Independent					-	.75	.65	.76	.71	.85	5.2
6 Calm						-	.83	.79	.94	.85	7.8
7 Sense of Humour							-	.77	.88	.68	6.6
8 Positive								-	.80	.81	8.5
9 Understanding									-	.88	14.7
10 Practical										-	8.9

It will be seen that all constructs correlate positively with each other and many correlate highly. The highest correlation is between helpful and understanding (.96); and the least between independent and friendly (.59). Even so, it appears that by describing a child (or adult) using one pole of any of the constructs, mothers are likely to be implying many attributes of the other constructs to the child (or adult) as well.

The final column in Table 7.1 gives the percentage of the total variation in the grid which is contributed by each construct. Helpful (15.0 %), friendly (13.0 %), responsible (11.5 %) and understanding (14.7 %) are seen to contribute more than the expected variation (10 % - total variation/N constructs), and are likely to be more relevant to the mothers of ESN (M) children than other constructs in the grid, when they construe these elements.

In simple terms, mothers of ESN (M) children clearly used all constructs to judge maturity, but with varying degrees of importance. Figure 7.01 illustrated the relatively low correlation

between independent and friendly. If the constructs do reflect aspects of maturity, then mothers of ESN (M) children see being helpful, friendly, responsible and understanding as major constituents of maturity, rather than independence, calmness and a sense of humour, which contributed least to the total variation in the grid.

### 7.3.2 Relevance of the Component Space to the Elements

#### a) Relation between constructs and ESN (M) children

Table 7.2 gives the correlations between ESN (M) children and each construct in the Mothers - ESN Grid.

TABLE 7.2

#### CORRELATIONS BETWEEN ESN (M) CHILDREN AND EACH CONSTRUCT IN THE MOTHERS - ESN GRID

<u>CONSTRUCTS</u>	<u>Correlations with ESN (M) Children</u>
	r
Can Make up Own Mind	.10
Helpful	.46
Friendly	.58
Responsible	.25
Independent	.13
Calm	.34
Sense of Humour	.37
Positive	.07
Understanding	.42
Practical	.04

Although there are no negative correlations between any of the constructs and the ESN (M) children, there is noticeably little correlation between the children and being able to make up their own minds ( $r = .10$ ); being positive ( $r = .07$ ) and being practical ( $r = .04$ ). Rather, ESN (M) children appear to be construed in terms of being friendly (.58), helpful (.46), and understanding (.42). These constructs have all been seen to be more relevant to the mothers' construct systems (as represented in this grid) than the other constructs.

b) Extent to which the elements contributed to the total variation in the grid

As with the constructs, it is possible to see what percentage each element contributed to the total variation in the grid. Table 7.3 lists the total deviation from constructs' means and the percentage each element contributed to the grid's total variation.

TABLE 7.3

TOTAL DEVIATION FROM CONSTRUCTS MEANS AND PERCENTAGE TO WHICH EACH ELEMENT CONTRIBUTES

<u>ELEMENT</u>	<u>TOTAL DEVIATION FROM CONSTRUCT MEANS</u>	<u>PERCENTAGE</u>
ESN (M) CHILD	.67	3.32
Normal Child	3.46	2.88
Older Child	4.73	6.17
Younger Child	-.48	.54
Dare Devil Child	-3.43	4.97
Good Child	3.78	4.14
Liked Adult	9.31	18.61
Problem Child	-10.80	25.84
Mature Child	3.99	3.00
Disliked Adult	-11.22	29.65

The table shows that ESN (M) children account for only 3.32% of the total deviation, not the expected ten per cent (i.e. total deviation/N elements). The constructs were apparently not relevant to these mothers in distinguishing their ESN (M) children from other children and adults. There were high negative deviations for problem children -10.80 (25.84 %) and disliked adults -11.22 (29.65 %), as opposed to the high positive deviation for the liked adult 9.31 (19.61 %), underlining the fact that a major component, and the majority of the constructs, may relate to discriminating mature people whom mothers liked and immature ones whom they disliked.

c) Distance between ESN (M) children and other elements

TABLE 7.4

DISTANCE BETWEEN ELEMENTS (MOST AND LEAST SIMILAR)  
MOTHERS - ESN GRID

ELEMENT	MOST SIMILAR		LEAST SIMILAR	
	ELEMENT	DISTANCE	ELEMENT	DISTANCE
ESN (M) Child	Younger	.42	Disliked Ad.	1.37
Normal Child	Older	.34	Disliked Ad.	1.49
Older Child	Mature	.31	Disliked Ad.	1.58
Younger Child	ESN (M)	.42	Disliked Ad.	1.14
Dare Devil Child	Younger	.45	Liked Ad.	1.31
Good Child	Older	.38	Disliked Ad.	1.56
Liked Adult	Mature	.56	Disliked Ad.	2.03
Problem Child	Disliked Ad.	.48	Liked Ad.	1.97
Mature Child	Liked Ad.	.56	Disliked Ad.	1.52
Disliked Adult	Problem	.48	Liked Ad.	2.03

Table 7.4 gives those elements which are seen to be closest and farthest from each of the ten elements in turn. Taking into account the total variation, it is possible to estimate the unit of expected distance between any two elements drawn from a construct system at random (Slater, 1972: P.7) [Square root of  $(2V/(m-1))$  when  $V$  = total variation, and  $m$  = number of elements].

In the case of the Mothers - ESN Grid the unit of expected distance between elements is 3.28. The distances between elements in Table 7.4 can be seen to be smaller than would have been expected. These distances take into account all the variation in the grid, and can, therefore, be used to give a more precise picture of the distance between elements than the map of Figure 7.01. The ESN (M) children are seen to be most like younger children and least like disliked adults by their mothers. In addition, the distance between ESN (M) children and normal children (.45), good children (.45) and mature children (.55) suggests a loose cluster of children whom parents see as relatively similar. Disliked adults are seen as farthest from the majority of other elements.

### Summary

Overall then, mothers of ESN (M) children show a strong tendency to use the constructs supplied in discriminating between people they thought were mature and whom they liked, and those whom they thought were immature and disliked. They distinguished ESN (M) children in terms of being more dependent, friendly, helpful and understanding, rather than practical, decisive or positive, and as such see them more like younger children than any of the other elements in the grid.

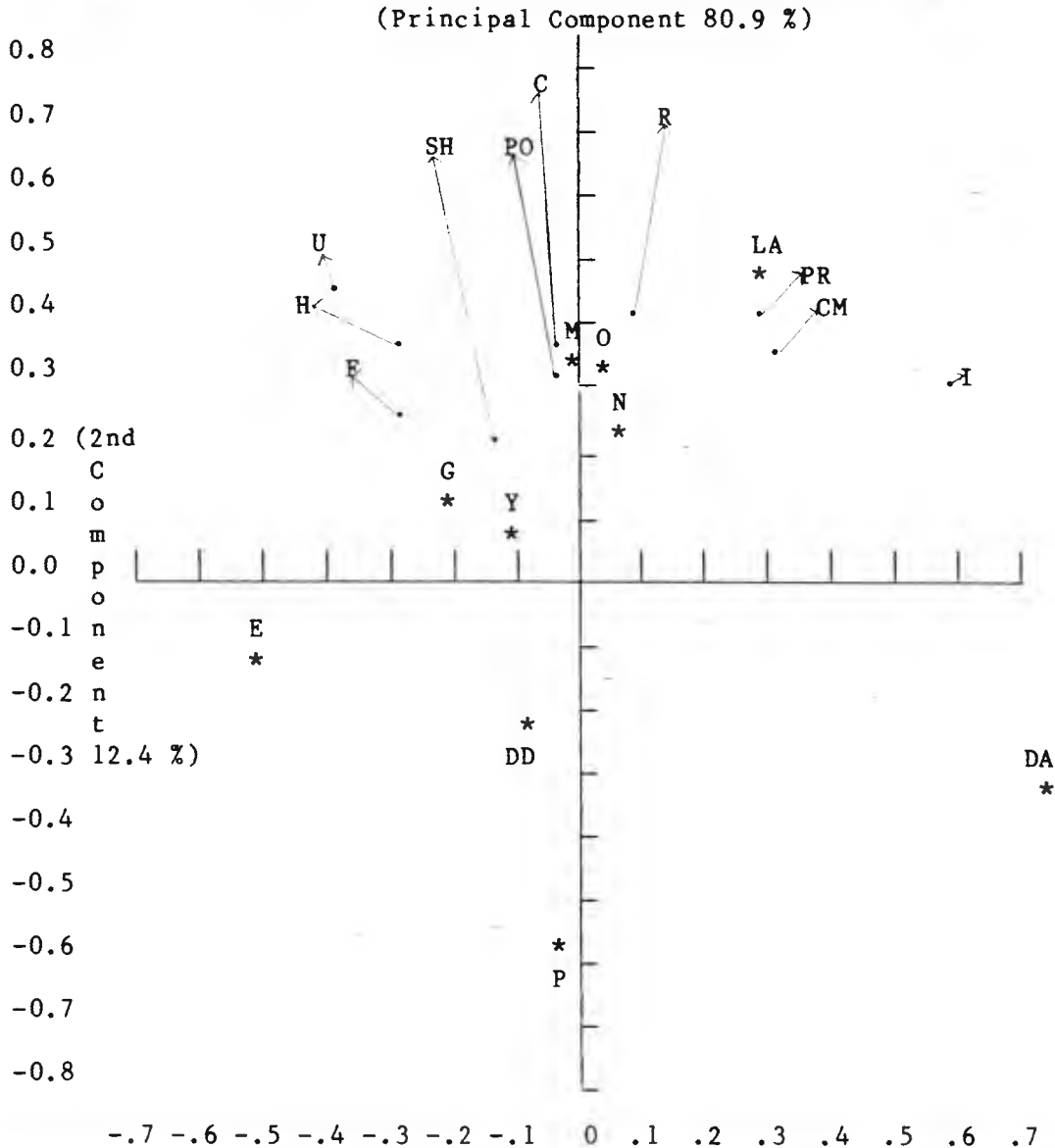
### 7.4 Teachers of ESN (M) Children

#### 7.4.1 Structure of the Component Space

A figure similar to Figure 7.01 for the mothers of ESN(M) children can also be drawn from the Teachers - ESN Grid. Figure 7.02 illustrates that the first principal component (vertical axis) comprises 80.9 % of the total variation in the teachers' component space. Component No. 2 accounted for 12.38 % of the component space. Although considerably smaller than the first principal component, it shows that the second component in the Teachers - ESN Grid had greater relevance to teachers than the second component did in the mothers' component space, which was only 5.7%.

FIGURE 7.02

ELEMENTS AND CONSTRUCTS FROM THE TEACHERS - ESN GRID PLOTTED ALONG  
THE TWO PRINCIPAL COMPONENTS FROM THE INGRID PROGRAMME

KEY: ELEMENTS (\*)

E ESN (M) child  
N Normal child  
O Older child  
Y Younger child  
DD Dare Devil child  
G Good child  
LA Liked Adult  
P Problem child  
M Mature child  
DA Disliked adult

CONSTRUCTS (->)

CM Can make up own mind  
H Helpful  
F Friendly  
R Responsible  
I Independent  
C Calm  
SH Sense of Humour  
PO Positive  
U Understanding  
PR Practical

A feature of the map drawn from the Teachers - ESN Grid is that the constructs form one close grouping (Friendly, Helpful,

Understanding and Sense of humour), and two other less tight groupings (Positive, Calm and Responsible; and Practical, Can make up own mind and Independent). These would appear to comprise three aspects of maturity for these teachers. All but four elements are seen within the positive sector comprised by these constructs. ESN (M), Dare Devil and Problem children, and Disliked Adults are seen in the opposite sector of the map. Both Dare Devil and Problem children are seen in terms of being Negative, Anxious and Irresponsible which thus appear to be characteristics of children seen as problematic. ESN (M) children are closer to the friendly grouping of constructs, but opposite the independent grouping, while disliked adults are opposite the friendly grouping, and closer to the independent grouping. The position of the Liked Adult, Mature and Older children around the centre of the positive poles of the constructs, suggests that teachers tend to like mature people, particularly those who are practical and independent etc.



a) Extent to which each construct contributed to the total variation in the grid, and their relationship to each other

TABLE 7.5

CORRELATIONS BETWEEN CONSTRUCTS IN THE TEACHERS - ESN GRID; AND PERCENTAGE OF TOTAL VARIATION TO WHICH EACH CONSTRUCT CONTRIBUTES

<u>CONSTRUCTS</u>	1	2	3	4	5	6	7	8	9	10	%
1 Can Make up Own Mind	-	.70	.61	.91	.83	.89	.55	.84	.74	.92	10.1
2 Helpful		-	.90	.82	.41	.89	.88	.88	.98	.75	15.5
3 Friendly			-	.78	.30	.73	.71	.71	.93	.57	6.5
4 Responsible				-	.68	.91	.55	.78	.85	.89	14.3
5 Independent					-	.74	.40	.64	.42	.80	10.9
6 Calm						-	.77	.93	.89	.95	9.3
7 Sense of Humour							-	.85	.84	.65	3.9
8 Positive								-	.86	.85	6.3
9 Understanding									-	.77	10.9
10 Positive										-	12.3

As the first principal component comprises such a large proportion of the component space (80.9 %), it will include the major aspects of many of the constructs. Table 7.5 gives the correlations between constructs. As in the Mothers - ESN Grid, teachers' constructs are all positively correlated, and many have high correlations. The highest correlation between constructs is between helpful and understanding ( $r = .98$ ), the lowest between friendly and independent ( $r = .30$ ).

Looking at the percentage of the total variation to which each construct contributed, it will be seen that there are six constructs which are used to discriminate between elements more than would be expected (10%: Total Variation/N constructs). These are, in order of importance, helpful (15.5%), responsible (14.3%), practical (12.3%), understanding (10.9%), independent (10.9%), and can make up own mind (10.01%). In contrast to mothers, friendly was used to contribute only 6.5% of the variation (Mothers: 13.0%), but mothers used independent (5.2%) considerably less widely than did teachers.

#### 7.4.2 Relevance of the Component Space to the Elements

a) The relation between constructs and ESN (M) children  
Table 7.6 below lists the correlations between the way teachers construe ESN (M) children and the constructs in the grid.

TABLE 7.6

#### CORRELATIONS BETWEEN ESN (M) CHILDREN AND THE CONSTRUCTS IN TEACHERS - ESN GRID

CONSTRUCTS	CORRELATIONS
Can Make up Own Mind	-.86
Helpful	-.35
Friendly	-.17
Responsible	-.60
Independent	-.93
Calm	-.70
Sense of Humour	-.39
Positive	-.67
Understanding	-.37
Practical	-.81

The most noticeable factor emerging from this table, is that there is a negative correlation between teachers' construing of ESN (M) children and all ten constructs in the grid. In other words, teachers use the negative pole of each construct to describe these children than the more positive pole. The three largest negative correlations (in order) are between ESN (M) children and independent, can make up own mind and practical, and suggest that teachers construe ESN (M) children as being dependent, unable to make up own mind and impractical. It will be seen that the least significant negative correlation is for friendly, which at  $-.17$  suggests that teachers do not consider ESN (M) children as particularly friendly or unfriendly. It will be remembered that ESN (M) children correlated positively with all the constructs in the Mothers - ESN Grid. This difference will be discussed more fully in the DELTA analysis.

b) Extent to which elements contributed to the total variation in the grid

The percentage of the total variation to which each element contributes is listed in Table 7.7. ESN (M) children account for 7.2 % of the total variation, which is less than the expected 10

%. However, it may be remembered that the variation in the Mothers - ESN Grid with regard ESN (M) children amounted to only 3.3 %, so the constructs in the grid would appear to be more relevant to teachers of ESN (M) children than to their mothers in construing the same ESN (M) children.

TABLE 7.7

TOTAL DEVIATION FROM CONSTRUCT MEANS AND PERCENTAGE TO WHICH EACH ELEMENT CONTRIBUTES

ELEMENT	TOTAL DEVIATION FROM CONSTRUCT MEANS	PERCENTAGE
ESN (M) CHILD	-4.01	7.23
Normal Child	3.83	4.04
Older Child	5.57	6.76
Younger Child	.67	.83
Dare Devil Child	-3.91	5.42
Good Child	1.94	2.42
Liked Adult	8.51	17.20
Problem Child	-6.38	32.82
Mature Child	5.73	7.30
Disliked Adult	-11.96	15.69

Liked Adults accounted for 17.20 % of the deviation, the problem children 32.82 %, and the disliked adults 15.89 % of the deviation, confirming that these constructs appear to be ones which distinguish the people teachers like and see as mature, as opposed to those whom they dislike and see as having problems.

c) Distance between ESN (M) children and other elements

TABLE 7.8

DISTANCE BETWEEN ELEMENTS (MOST AND LEAST SIMILAR)  
TEACHERS - ESN GRID

ELEMENT	MOST SIMILAR		LEAST SIMILAR	
	ELEMENT	DISTANCE	ELEMENT	DISTANCE
ESN (M) CHILD	Dare Devil	.47	Liked Ad.	1.37
Normal Child	Older	.26	Problem	1.62
Older Child	Mature	.20	Problem	1.75
Younger Child	Good	.24	Problem	1.29
Dare Devil Child	ESN (M)	.47	Liked Ad.	1.31
Good Child	Younger	.24	Problem	1.45
Liked Adult	Older	.40	Problem	2.04
Problem Child	Dare Devil	.83	Liked Ad.	2.04
Mature Child	Older	.20	Problem	1.79
Disliked Adult	Dare Devil	.74	Liked Ad.	1.55

Table 7.8 gives those elements which are closest and farthest from each of the ten elements in turn, taking into account all nine dimensions of the component space. All the distances - including those between the elements farthest apart in the grid are below the unit of expected distance of 3.27. Teachers tended to see the ESN (M) children most like dare devil children (.47) and least like liked adults (1.37). The fact that they were seen as least similar to liked adults may appear an interesting contradiction, as dare devil children were defined as children who were liked, but who were seen as being naughty. Perhaps it is the naughty aspect which teachers see as linking dare devil to the ESN (M) children, and dissociating them from liked adults.

The finding suggests that when compared with the distances between elements in the Mothers - ESN Grid, mothers and teachers construe these ESN (M) children in different ways. Mothers see their own ESN (M) children most like younger children, and least like disliked adults; teachers see them as most like dare devil children and least like the kind of adults they liked. This will be discussed in more detail in the DELTA analysis section.

### Summary

Teachers of ESN (M) children used the constructs in the grid in distinguishing between those whom they liked and thought mature and those whom they disliked and thought immature. ESN (M) children were seen in negative terms on all the constructs. Teachers saw ESN (M) children most strongly in terms of being indecisive, dependent, impractical and anxious. Friendly which correlated positively with ESN (M) children in the Mothers - ESN Grid showed the lowest correlation of all. In terms of the other elements, teachers saw ESN (M) children as most like dare devil children.

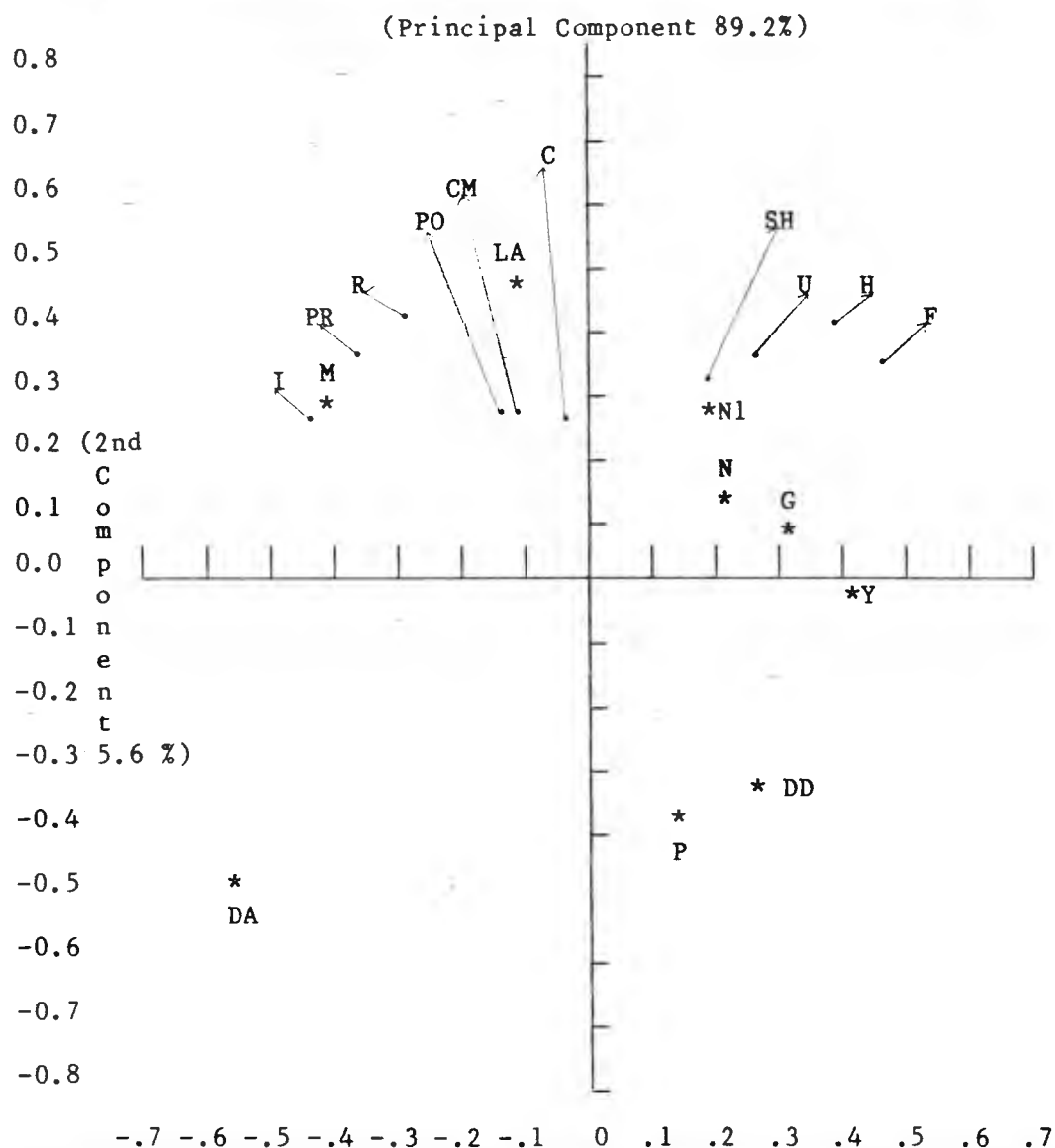
## 7.5 Mothers of Normal Children

### 7.5.1 Structure of the Component Space

Figure 7.03 gives the two-dimensional picture of the component space of the Mothers - N Grid. It will be seen that the principal component accounts for 89.2 % of the variation in the grid, the second component accounts for 5.6 %. This pattern of the principal component accounting for so much of the variation follows the trend of the previous two consensus grids already discussed.

DIAGRAM 7.03

ELEMENTS AND CONSTRUCTS FROM THE MOTHERS - N GRID PLOTTED ALONG  
THE TWO PRINCIPAL COMPONENTS FROM THE INGRID PROGRAMME



## KEY: ELEMENTS (\*)

N1 Normal(target) child  
N Normal child  
O Older child  
Y Younger child  
DD Dare Devil child  
G Good child  
LA Liked Adult  
P Problem child  
M Mature child  
DA Disliked adult

## CONSTRUCTS(-&gt;)

CM Can make up own mind  
H Helpful  
F Friendly  
R Responsible  
I Independent  
C Calm  
SH Sense of Humour  
PO Positive  
U Understanding  
PR Practical

Figure 7.03 shows that the constructs fall into two major groupings in the Mothers - N Grid. One group consists of Friendly,

Helpful, Understanding and Sense of Humour; the other consists of Calm, Can make up own mind, Positive, Responsible, Practical and Independent. This pattern does not appear to be dissimilar to that of the Mothers - ESN Grid (Figure 7.01). All elements except four lie within the positive sector of the map. Most noticeably it is Problem and Dare Devil children and the Disliked Adult who are in the opposite sector of the map from the positive poles of all constructs, showing again a tendency for mothers to like mature people and dislike immature people whom they may see as problematic.

a) Extent to which each construct contributes to the total variation in the grid, and the correlations between constructs

Table 7.9 lists the correlations between constructs. All constructs correlate positively, ranging from the lowest correlation between friendly and independent (.63), to the highest correlation between sense of humour and understanding (.96).

TABLE 7.9

CORRELATIONS BETWEEN CONSTRUCTS IN THE MOTHERS - N GRID:  
AND PERCENTAGES OF THE TOTAL VARIATION TO WHICH EACH CONSTRUCT  
CONTRIBUTES

CONSTRUCTS	1	2	3	4	5	6	7	8	9	10	%
1 Can Make up Own Mind	-	.81	.85	.83	.83	.90	.77	.91	.85	.86	8.8
2 Helpful		-	.93	.88	.70	.91	.95	.80	.96	.82	14.2
3 Friendly			-	.79	.63	.85	.89	.86	.95	.75	11.4
4 Responsible				-	.88	.92	.92	.95	.93	.97	16.4
5 Independent					-	.79	.75	.92	.74	.91	6.2
6 Calm						-	.88	.92	.93	.92	6.9
7 Sense of Humour							-	.89	.96	.88	8.8
8 Positive								-	.92	.95	6.9
9 Understanding									-	.89	10.8
10 Practical										-	9.6

Constructs which account for a greater percentage of the total variation in the component space than would be expected (10 %) are helpful (14.2 %), friendly (11.4 %), responsible (16.4 %) and understanding (10.8 %). This points to mothers of Normal (target) children finding these constructs more relevant than the others when they construe these elements. These are the same constructs which mothers of ESN (M) children found to be most relevant in their grids.

#### 7.5.2 Relevance of the Component Space to the Elements

##### a) Correlations between constructs and mothers' own Normal children

Table 7.10 gives the correlations between the Normal (target) children and each of the constructs in the Mothers - N Grid.



TABLE 7.10

CORRELATIONS BETWEEN NORMAL (TARGET) CHILDREN AND CONSTRUCTS  
IN THE PARENTS - N GRID

<u>CONSTRUCTS</u>	<u>CORRELATIONS</u>
Can Make up Own Mind	.85
Helpful	.92
Friendly	.95
Responsible	.87
Independent	.76
Calm	.82
Sense of Humour	.93
Positive	.90
Understanding	.94
Practical	.83

There is a high degree of positive correlation between all constructs and the construing of Normal (target) children by their own mothers. This appears to differ substantially from mothers of ESN (M) children where positive correlations were no higher than .58 (friendly); and where there was virtually no correlation between positive or independent and ESN (M) children.

b) Extent to which the elements contributed to the total deviation in the Grid

Looking at the amount of the total deviation to which each element contributes (Table 7.11), it would appear that the way mothers construe their own (and control group) Normal children does not appear to contribute much to the variation (5.06 % and 2.58 % respectively) in the total grid. Conversely, liked adults, dare devil and problem children, and disliked adults together account for 77.64 % of the total variation in the grid, confirming that the component probably distinguishes a strong element of those qualities which mothers like and dislike.

TABLE 7.11

TOTAL DEVIATION ABOUT CONSTRUCT MEANS AND PERCENTAGE TO WHICH  
EACH ELEMENT CONTRIBUTES IN MOTHERS - N GRID

ELEMENT	TOTAL DEVIATION FROM CONSTRUCT MEAN	PERCENTAGE
Normal (Target) Child	4.39	5.06
Normal (Control) Child	2.56	2.58
Older Child	4.62	5.48
Younger Child	-.66	1.38
Dare Devil Child	-7.11	13.01
Good Child	1.11	1.40
Liked Adult	9.39	20.15
Problem Child	-8.61	16.83
Mature Child	4.78	6.47
Disliked Adult	-10.55	27.65

### Summary

Analysis of the grid shows that mothers of Normal children use all constructs to judge between mature and immature people; and that it is the positive poles of those constructs supplied which they like in people. They construe their own Normal children towards the preferred pole of all constructs. Even so, the constructs were used more widely, and were thus more relevant, in distinguishing other elements (children and adults) in the grid as compared to their own children. Normal children were seen positively in terms of all the grid's constructs, but particularly as friendly, understanding and helpful.

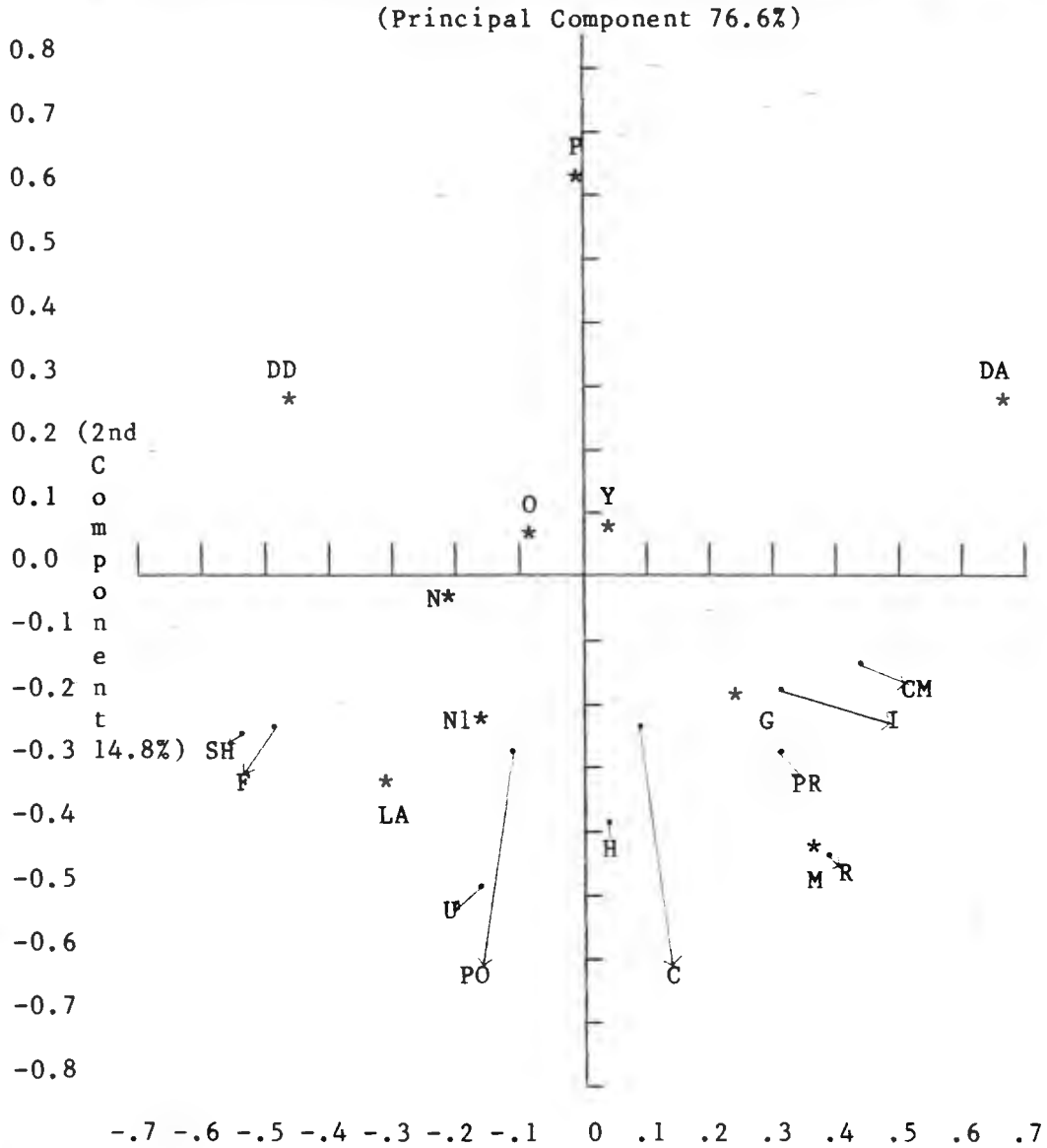
## 7.6 Teachers of Normal Children

### 7.6.1 Structure of the Component Space

The two-dimensional map of the component space of teachers of Normal children (Figure 7.04) shows that the first principal component accounts for 76.6 % of the grid's variation. The second component accounts for 14.8 %. Although this pattern is similar to the three previous grids, the bipolarity of the grid is not so pronounced - i.e. the second component accounts for wider variation in the component space than has been seen in the previous three grids discussed.

FIGURE 7.04

ELEMENTS AND CONSTRUCTS FROM THE TEACHERS - N GRID PLOTTED ALONG THE TWO PRINCIPAL COMPONENTS FROM THE INGRID PROGRAMME



KEY: ELEMENTS (*)	CONSTRUCTS (->)
N1 Normal(target) child	CM Can make up own mind
N Normal child	H Helpful
O Older child	F Friendly
Y Younger child	R Responsible
DD Dare Devil child	I Independent
G Good child	C Calm
LA Liked Adult	SH Sense of Humour
P Problem child	PO Positive
M Mature child	U Understanding
DA Disliked adult	PR Practical

In the figure of the Teachers - N Grid two constructs are seen to lie closely together - Friendly and Sense of Humour. The rest fall in a more widely dispersed group, although the positive poles of all the constructs fall in one half of the map. In the opposite half of the grid are placed Problem, Dare Devil, Older and Younger children and the Disliked Adult, although the older and younger children are near the centre of the grid and are therefore not particularly distinguished from the other elements in this grid. As in the other grids, the constructs appear to be used to differentiate mature people who are liked from problematic, disliked and immature people. Teachers of Normal children seem to use the constructs of maturity in a more complex (i.e. less bipolar) manner than any of the other three groups.

a) Extent to which each construct contributed to the total variation of the grid; and correlations between the constructs

The table of correlations between constructs shows that almost all the constructs correlate positively. Unlike the other three previous similar tables for the other groups, these correlations show a far wider range of relationship. (Table 7.12)

TABLE 7.12

CORRELATIONS BETWEEN CONSTRUCTS IN THE TEACHER - N GRID; AND PERCENTAGES OF THE TOTAL VARIATION TO WHICH EACH CONSTRUCT CONTRIBUTES

CONSTRUCTS	1	2	3	4	5	6	7	8	9	10	%
1 Can Make up Own Mind	-	.36	.00	.58	.86	.55	-.04	.28	.31	.69	5.7
2 Helpful		-	.70	.92	.60	.75	.68	.91	.93	.85	12.7
3 Friendly			-	.51	.09	.71	.82	.79	.84	.43	8.2
4 Responsible				-	.77	.80	.46	.83	.83	.96	18.0
5 Independent					-	.62	.24	.56	.53	.85	3.6
6 Calm						-	.50	.76	.87	.82	7.1
7 Humour							-	.84	.77	.39	10.6
8 Positive								-	.95	.78	6.6
9 Understanding									-	.78	20.9
10 Practical										-	6.6

Positive and understanding correlate highly ( $r = .95$ ), as do helpful and responsible ( $r = .92$ ), helpful and understanding ( $r = .93$ ), and responsible and practical ( $r = .96$ ). Making up one's own mind and being friendly do not correlate at all in this grid

( $r = .00$ ); and making up own's own mind has virtually no correlation with having a sense of humour ( $r = -.04$ ). Friendly also shows virtually no correlation with being independent ( $r = .09$ ). Compared with the high positive correlations of all constructs in the Mothers - N Grid, this could mean that when a mothers says a child can make up his/her own mind, she is also likely to think he/she may be friendly ( $r = .85$ ). For the teacher there is no such necessary implication.

Considering the percentage of the total variation to which each construct contributes, it will be seen that teachers tend to use responsible (18.04) and understanding (20.9) more than other constructs.

#### 7.6.2 Relevance of the Component Space to the Elements

##### a) Relationship between constructs and Normal (target) children

Table 7.13 gives the correlations between the way teachers construe the Normal (target) children and the constructs. All constructs are positively correlated with the Normal (target) children as was the case with mothers of the same children. However, the Normal (target) children are particularly highly correlated with being helpful (.93), friendly (.81), having a sense of humour (.84) and being positive (.96) and understanding (.94). They were not seen particularly in terms of being able to make up their own minds. In contrast, mothers saw their children in very positive terms on all constructs.

TABLE 7.13

CORRELATION BETWEEN NORMAL (TARGET) CHILDREN AND THE CONSTRUCTS  
IN THE TEACHERS - N Grid

CONSTRUCTS	CORRELATIONS
Can Make up Own Mind	.16
Helpful	.93
Friendly	.81
Responsible	.78
Independent	.43
Calm	.67
Sense of Humour	.84
Positive	.96
Understanding	.94
Practical	.68

b) Extent to which elements contribute to the total deviation  
in the grid

Finally in this section, it is possible to see the extent to which the Normal (target) children contribute to the variation in the grid. As will be seen in Table 7.14, the Normal (target and control) children account only for a tiny proportion of the total variation (4.48 % and 1.83 % respectively) within the component space. Disliked and liked adults, and dare devil, problem and mature children account for the major variation (85.97% in total). Thus although the Normal (target) children are seen in relatively positive terms on both components, in effect they account for only a small proportion of the variation in the teachers' construct system (using these constructs), i.e. if these are constructs which describe maturity, they appear not to be very relevant to teachers in construing Normal children.

TABLE 7.14

TOTAL DEVIATION FROM CONSTRUCT MEANS AND PERCENTAGE TO WHICH  
EACH ELEMENT CONTRIBUTES TO THE TOTAL VARIATION IN THE  
TEACHERS - N GRID

ELEMENT	TOTAL DEVIATION FROM CONSTRUCT MEANS	PERCENTAGE
Normal (Target) Child	3.37	4.48
Normal (Control) Child	.43	1.83
Older Child	-1.18	.84
Younger Child	-1.35	1.73
Dare Devil Child	-4.85	10.45
Good Child	2.82	5.15
Liked Adult	6.32	12.74
Problem Child	-10.02	29.83
Mature Child	8.43	19.43
Disliked Adult	-3.96	13.52

#### Summary

Teachers of Normal children have been seen to use the constructs in this grid more widely than teachers of ESN (M) children, and mothers of both ESN (M) and Normal children. Teachers see these children in terms of being helpful, positive and understanding, although the constructs in general were not particularly relevant - compared to other children and adults - in construing the Normal (target) children.

#### 7.7 DELTA

In the previous discussion of the INGRID analyses of the Mother - ESN and the Teacher - ESN (and Mother - N and Teacher - N) Grids, I have drawn a few comparisons between the way mothers and teachers construe the same ESN (M) or Normal children. In the DELTA analysis, I shall comment on two specific aspects of the differences (or similarities) in the pairs of grids:-

a) The different (or similar) ways mothers and teachers construe maturity (assuming that the constructs are aspects of maturity), and the differing implications constructs may have for mothers and teachers.

b) The different (or similar) ways mothers and teachers construe the same ESN (M) (and Normal) children.

7.7.1 Mothers and Teachers of ESN (M) CHILDREN (Mother - ESN Grid with Teacher - ESN Grid)

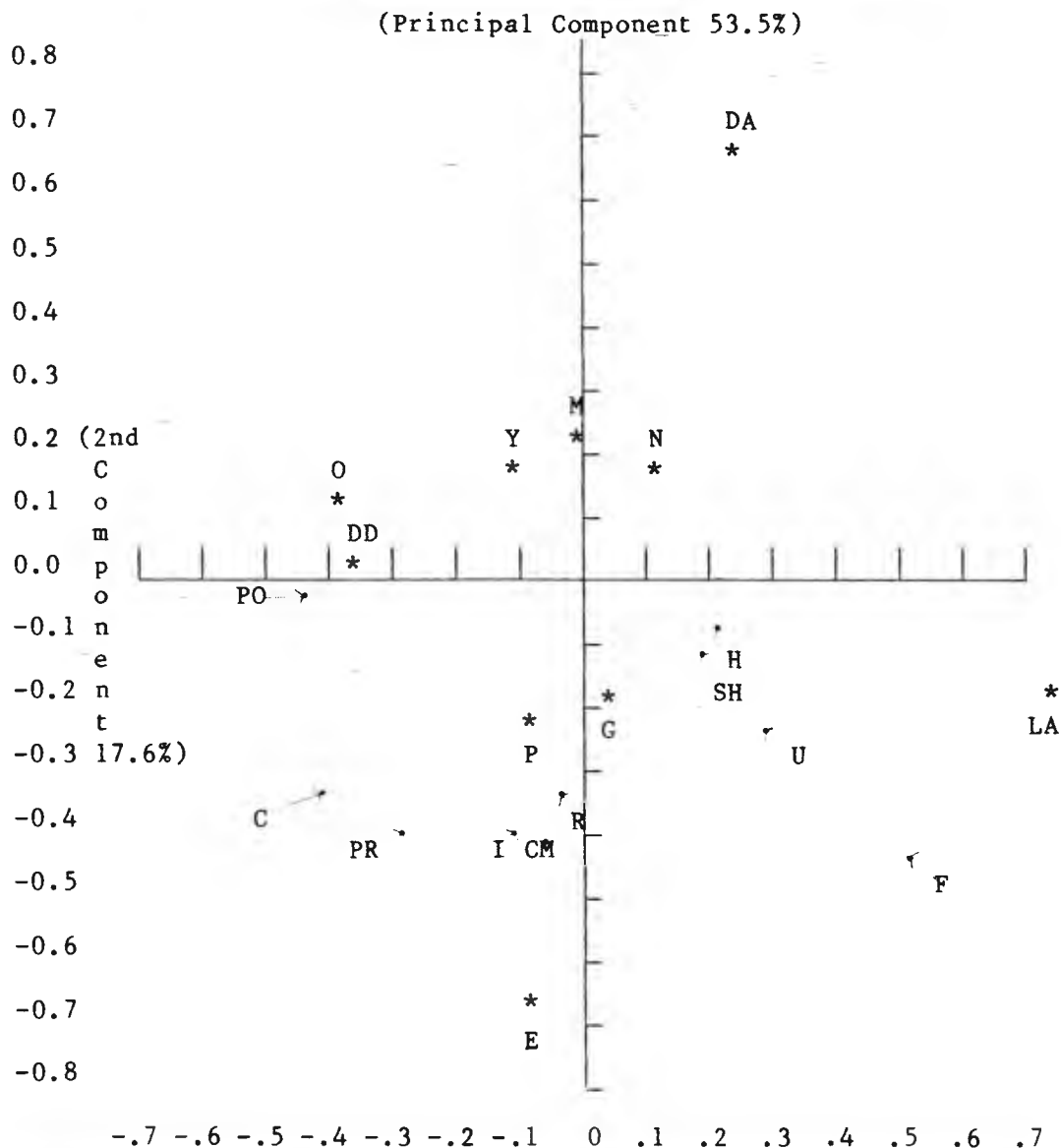
a) Comparison of the component space with regard to constructs

Figure 7.05 shows the difference between the two grids based on the two principal components. As I have already explained (7.2.1) this and subsequent DELTA diagrams differ from the INGRID diagrams in the previous section. The diagram shows differences between the two grids, so that the further all points are away from the centre, the greater the difference between the grids on a particular element or construct. Elements and constructs near the centre indicate little difference.



FIGURE 7.05

DIFFERENCES IN THE MOTHERS - ESN AND TEACHERS - ESN GRIDS  
PLOTTED ALONG THE TWO PRINCIPAL COMPONENTS FROM  
THE DELTA PROGRAMME



KEY:	ELEMENTS (*)	CONSTRUCTS (->)
	E ESN (M) child	CM Can make up own mind
	N Normal child	H Helpful
	O Older child	F Friendly
	Y Younger child	R Responsible
	DD Dare Devil child	I Independent
	G Good child	C Calm
	LA Liked Adult	SH Sense of Humour
	P Problem child	PO Positive
	M Mature child	U Understanding
	DA Disliked adult	PR Practical

Figure 7.05 shows that the two principal components account for only 71% of the component space. The third component contributed

to 10.3% of the variation. Thus while Figure 7.05 represents a fairly comprehensive picture of the differences between the two grids, nearly 30% of the variation is not accounted for in the diagram.

The DELTA program produces a figure for the general degree of correlation between two grids. In this instance, the degree of correlation was .86 which indicates that mothers and teachers of the same ESN (M) children construed the elements as a whole, when using these constructs, in much the same way.

Table 7.15 lists the correlations between each of the mothers' and teacher's constructs.

TABLE 7.15

CORRELATIONS BETWEEN CONSTRUCTS IN MOTHER - ESN GRID AND  
TEACHER - ESN GRID

CONSTRUCTS	CORRELATIONS
Can Make up Own Mind	.80
Helpful	.95
Friendly	.80
Responsible	.90
Independent	.83
Calm	.82
Sense of Humour	.88
Positive	.82
Understanding	.95
Practical	.90

Mothers and teachers of ESN (M) children generally tend to use all the constructs similarly when construing the elements in the grid.

b) Comparison between the way ESN (M) children are construed by mothers and teachers

Referring back to Figure 7.05, it is possible to see whether mothers and teachers differ in the way they construe ESN (M) children (and the other elements). It is when the differences between the mothers' and teachers' ratings are plotted against the two principal components, that it becomes immediately apparent that the small variation between the two grids is accounted for principally by three elements, ESN (M) children, and disliked and

liked adults. These three fall furthest from the centre point of the two axes. This can be clarified by looking at the Table of Differential Changes (Table 7.16), which shows the percentage each element contributed to the total variation. ESN (M) children contributed to 20.16 %, liked adults to 13.48 % and disliked adults to 25.93 % of the variation. Each of the other elements (with the exception of the problem children) accounted for under 6 % of the variation.

TABLE 7.16

GRID OF DIFFERENTIAL CHANGES BETWEEN ELEMENTS ON EACH CONSTRUCT  
IN MOTHERS - ESN AND TEACHERS - ESN GRID

(Allowance is made for any general tendency for the gradings of the elements to change up or down from the mothers' to the teachers' grid.)

CONSTRUCTS	ELEMENTS									
	ESN	NOR	OLD	YOUNG	DARE	GOOD	L.A.	PROB	MAT	D.A.
Makes/mind	.84	-.06	-.11	.53	.36	-.01	.21	.10	-.01	-.79
Helpful	.55	.13	.34	-.29	-.08	.03	.08	-.13	-.24	.29
Friendly	.38	.23	-.25	-.41	-.35	.44	.86	.28	-.35	-.83
Responsible	.45	-.44	.19	-.18	.08	-.02	.35	.45	-.39	-.49
Independent	.69	-.26	-.15	.22	-.21	.43	.01	.37	-.26	-.84
Calm	.65	-.14	.07	.23	.17	-.09	-.03	.49	-.35	-.72
Humour	.32	.06	-.52	.16	.16	.16	.22	-.42	.11	-.26
Positive	.01	.53	.43	-.15	.43	.27	-.57	-.36	-.26	-.31
U/standing	.38	-.04	-.25	-.09	-.25	.27	.43	.06	-.15	-.36
Practical	.42	-.37	.10	-.11	.15	.36	-.48	.31	.15	-.53
TOTAL	4.68	-.37	-.84	1.16	.47	1.84	.79	1.16	-1.74	-.84
Percentage	20.2	5.9	5.9	5.5	4.8	5.2	13.5	8.3	4.9	25.9
Sign Test	*	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	*
<p>Key: - = Mothers rate children lower than teachers</p> <p>ESN= ESN (M) child: NOR=Normal child: OLD=Older child  YOUNG=Younger child: DARE=Dare Devil child: GOOD=Good child  L.A.=Liked adult: PROB=Problem child: MAT=Mature child:  D.A.=Disliked adult</p> <p>* = P&lt;0.05 (two tail): N.S. = Not significant</p>										

The sign test indicates that mothers and teachers consistently differed in their construing of ESN (M) children ( $P < 0.05$ ). On all constructs mothers rated ESN (M) children higher than teachers, indicating they thought the children were more able to make up their own mind, were more helpful etc. than did teachers. This has already been suggested when the INGRID analyses were discussed. It will be remembered that in the Mothers - ESN Grid ESN (M) children correlated with the positive pole of all constructs, while in the Teachers - H/C Grid, ESN (M) children

correlated with the negative poles of the constructs. In effect this means that when describing ESN (M) children, mothers tend to describe them as relatively mature (using these constructs) compared to teachers who see them as immature.

Conversely, teachers consistently rated the kind of adults they disliked in more positive terms than did mothers (Sign Test =  $P < 0.05$ ), except with regard to being helpful.

Concentrating on the different ways mothers and teachers rated ESN (M) children on each individual construct (Table 7.16), it will be seen that the teachers and mothers differed most when assessing children as being a) able to make up their own minds (.84); b) independent (.69); and c) calm (.65). If it is really the case that mothers perceive their ESN (M) children as more decisive, independent and calm, then it might be expected that mothers would allow them greater freedom and autonomy to go out alone etc. than would teachers. Indeed, it might be concluded that in many of the skills involved in the questionnaire, mothers might rate ESN (M) children as a group as more competent than did teachers. Yet, it has already been seen that although mothers and teachers do not agree in assessing children in many areas in the questionnaire, there were only two occasions when mothers rate ESN (M) children as a group as more competent in specific tasks than did teachers.

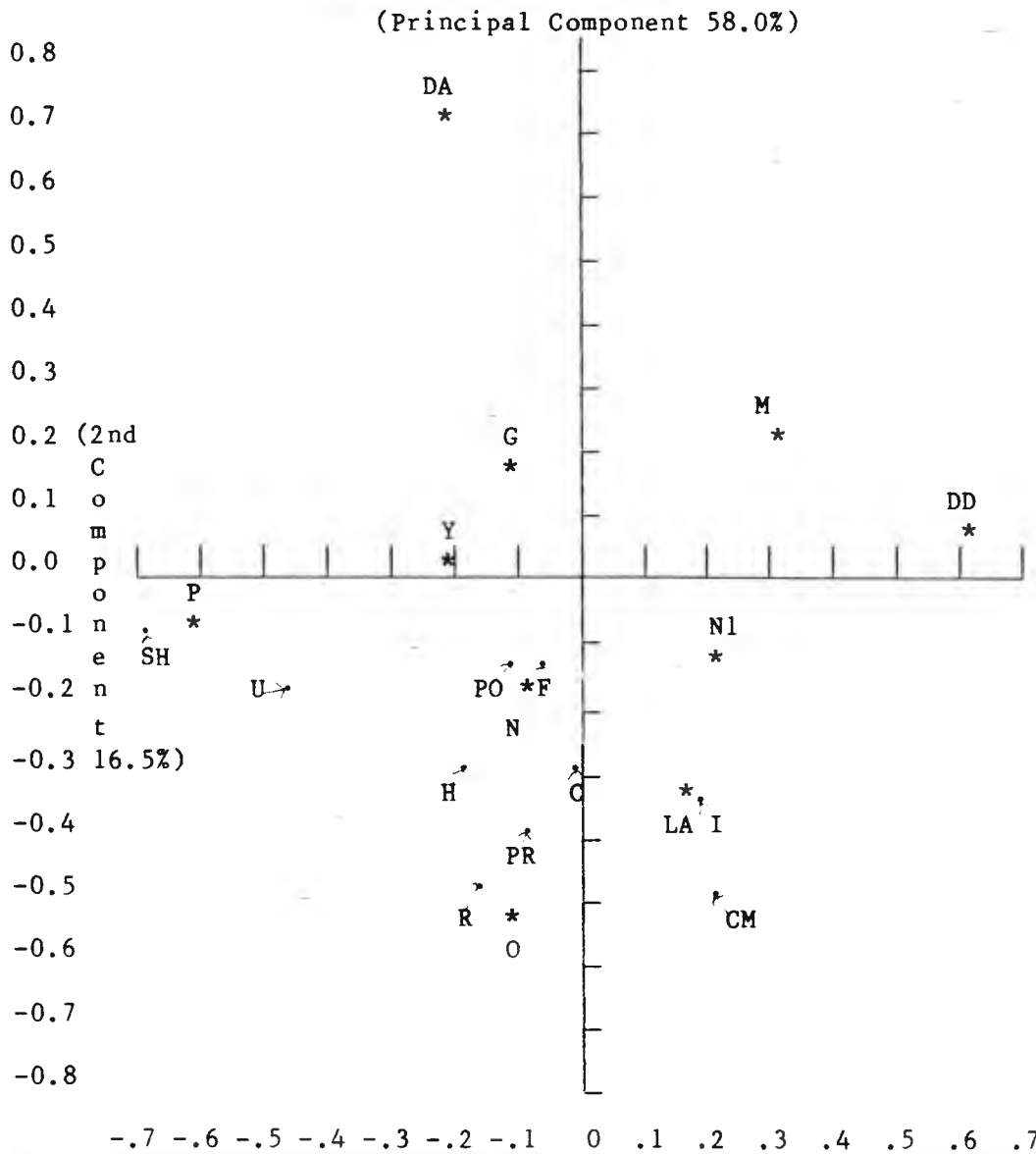
In summary, although mothers and teachers of ESN (M) children used the constructs in much the same way, they did not construe ESN (M) children (and disliked adults) similarly. Mothers perceived the children as more mature (in terms of these constructs) than did teachers.

#### 7.7.2 Mothers and Teachers of Normal Children - (Mothers - N Grid with Teachers - N Grid

The more positive attitude towards ESN (M) children that mothers hold in comparison to teachers as found in the previous set of results, may reflect no more than a natural tendency in mothers to see their own children in more positive terms than do teachers. Therefore, a comparison between the Mothers and Teachers - N Grids was carried out to see if this was found to be true.

FIGURE 7.06

DIFFERENCES IN THE MOTHERS - N AND TEACHERS - N GRIDS  
 PLOTTED ALONG THE TWO PRINCIPAL COMPONENTS FROM  
 THE DELTA PROGRAMME



KEY:	ELEMENTS (*)	CONSTRUCTS (->)
N1	NORMAL (target) child	CM Can make up own mind
N	Normal child	H Helpful
O	Older child	F Friendly
Y	Younger child	R Responsible
DD	Dare Devil child	I Independent
G	Good child	C Calm
LA	Liked Adult	SH Sense of Humour
P	Problem child	PO Positive
M	Mature child	U Understanding
DA	Disliked adult	PR Practical

a) Comparison of the component space with regard to constructs

The two principal components in Figure 7.06 will be seen to account for just under 75 % of the component space. (The third component accounted for 8.8 %). Therefore 25 % of the variation in the grid is unaccounted for in the figure.

The general degree of correlation between the two grids was .73. Thus mothers and teachers of normal children tended to use the constructs supplied in much the same way when rating the elements in the grid.

TABLE 7.17

CORRELATIONS BETWEEN CONSTRUCTS IN MOTHER - N GRID AND  
TEACHER - N GRID

CONSTRUCTS	CORRELATIONS
Can Make up Own Mind	.21
Helpful	.80
Friendly	.88
Responsible	.76
Independent	.60
Calm	.76
Sense of Humour	.67
Positive	.87
Understanding	.86
Practical	.70

Looking at Table 7.17, however, the agreement between the way mothers and teachers use the individual constructs is not as uniform as it was between mothers and teachers of ESN (M) children (where the lowest correlation was .80). Although these mothers and teachers tend to agree to some extent on all constructs, there is only a slight correlation between mothers' and teachers use of can make up own mind (.21). There is considerable agreement between the way they use friendly (.88), positive (.87) and understanding (.86).

b) Comparison between the way Normal children were construed by mothers and teaches

Figure 7.06 also showed the extent of agreement/disagreement between mothers and teachers over how they construed the children and adults in the grid. N1 (target Normal child) is seen to be rela-

tively near the centre of the two axes of the diagram, indicating little disagreement between mothers and teachers. On the other hand, older children, and disliked adults, are nearer the periphery which indicates mothers and teachers tend to disagree about how they perceive them.



TABLE 7.18

DIFFERENTIAL CHANGES BETWEEN ELEMENTS ON EACH CONSTRUCT  
IN MOTHERS - N AND TEACHERS - N GRID

(Allowance is made for any general tendency for the gradings of the elements to change up or down from the mothers' to the teachers' grid.)

CONSTRUCTS	ELEMENTS									
	NI	NOR	OLD	YOUNG	DARE	GOOD	L.A.	PROB	MAT	D.A.
Makes/mind	.49	.43	.88	.04	.32	-.18	.49	-.46	-.23	-1.79
Helpful	-.03	.13	-.03	.52	-.09	-.20	.41	.69	-.26	-1.14
Friendly	.40	.12	.57	-.04	-.21	.46	-.27	-.27	-.38	-.38
Responsible	.05	.27	.88	-.23	-.34	-.73	.83	.61	-.45	-.89
Independent	.28	.17	.45	.06	-.11	-.44	.84	-.38	-.22	-.66
Calm	-.03	.53	.75	-.14	.03	-.31	.19	-.08	-.53	-.42
Humour	.07	.24	.24	.24	-1.37	.52	-.04	.47	-.26	-.21
Positive	-.14	-.31	.58	.24	-.31	.02	.30	.02	-.20	-.20
U/standing	.27	.45	.56	.34	-.05	-.38	-.27	.62	-.99	.01
Practical	.21	.09	.93	-.35	-.13	-.41	.59	.09	-.13	-.91
TOTAL	1.02	2.13	5.80	.69	-2.26	-1.64	3.08	1.41	-3.64	-6.59
Percentage	2.6	4.1	17.7	3.0	9.6	7.0	10.2	8.4	8.0	29.3
Sign Test	N.S.	*	*	N.S.	N.S.	N.S.	N.S.	N.S.	*	*
<p>Key: - = Mothers rate children lower than teachers</p> <p>NI= Normal(contrast) child: NOR=Normal child: OLD=Older Child  YOUN=Younger child: DARE=Dare Devil child: GOOD=Good child  L.A.=Liked adult: PROB=Problem child: MAT=Mature child:  D.A.=Disliked adult</p> <p>* = P&lt;0.05 (two tail): N.S. = Not significant</p>										

Looking at Table 7.18 it will be seen that the greatest variation contributed by any one element was the disliked adult (29.3 %). Mothers consistently (Sign Test: P<0.05) construed disliked adults in less positive terms than did teachers.

However, of greatest significance to the present thesis, is the percentage of the variation caused by the Normal (target) children. This was only 2.6 % and, as will be seen in Table 7.18, a sign test on the ratings was non-significant. In terms of

helpfulness, responsible, calm and a sense of humour, there was virtually no disagreement at all between mothers and teachers over the same Normal children. Although teachers rated the children as slightly more positive (-.14), in all the remaining instances mothers rated their own children higher than did teachers. However, on the whole, mothers and teachers showed very little disagreement about how they construed the same Normal children.

This is in contrast to comparable results for ESN (M) children. There mothers significantly rated their own ESN (M) children as more mature than did teachers, and where the disagreement contributed substantially to the variation between the two grids.

#### Summary

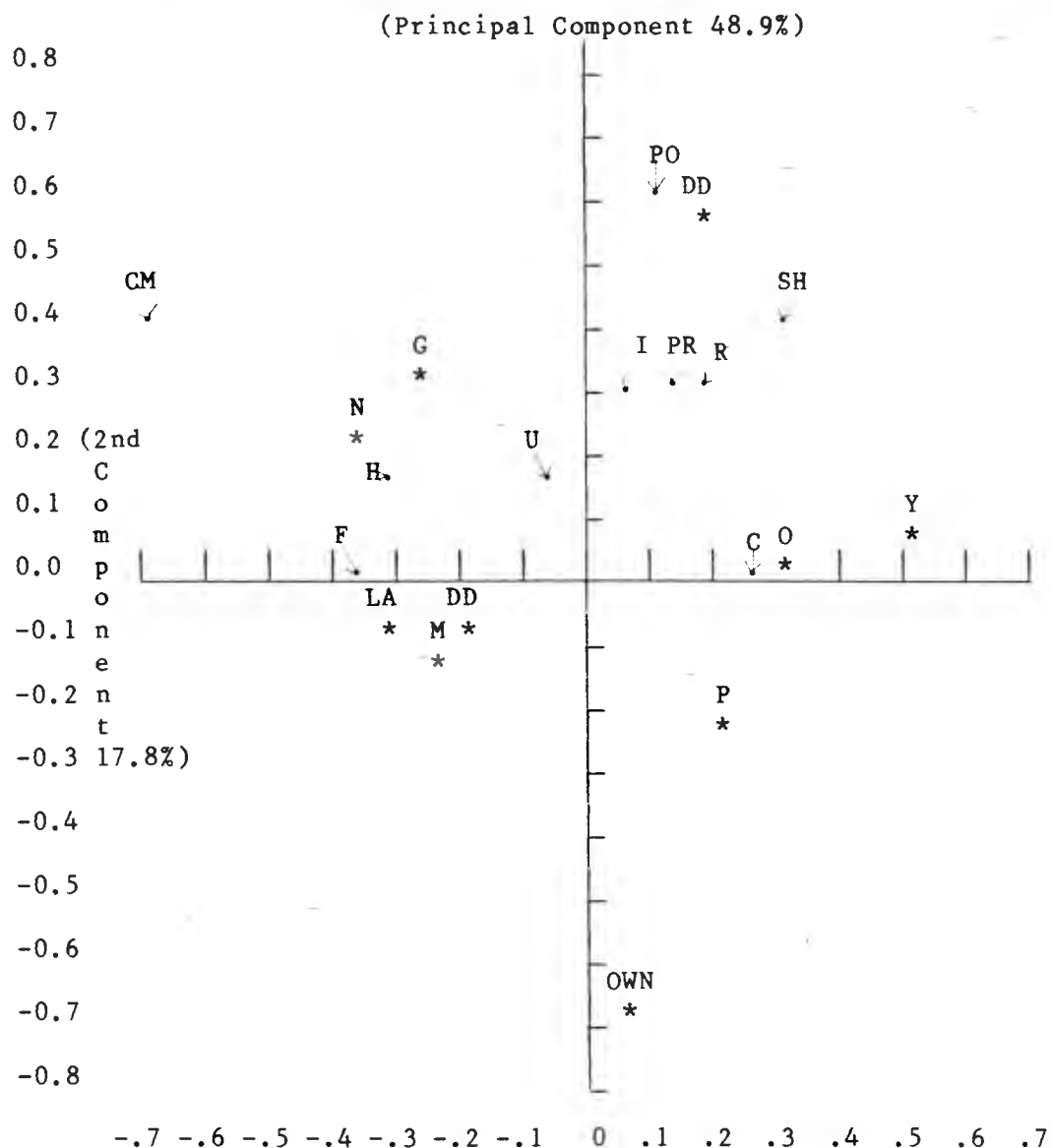
Mothers and teachers of Normal children agree on how they use these ten constructs, although apparently less than those mothers and teachers of ESN (M) children. Unlike mothers and teachers of ESN (M) children, they show close agreement in how they construe the same Normal children, particularly in terms of the children's friendliness, sense of responsibility, calmness and sense of humour.

### 7.7.3 Mothers of ESN (M) AND NORMAL CHILDREN - Mothers - ESN and N Grids

Mothers had rated ESN (M) children as a group as more mature (in terms of the grid) than had teachers, although in the case of Normal children mothers and teachers had agreed in their perception of the children as a group. A comparison between mothers' perceptions of their own ESN (M) and own Normal children was, therefore, appropriate.

FIGURE 7.07

DIFFERENCES IN THE MOTHERS - ESN AND MOTHERS - N GRIDS  
PLOTTED ALONG THE TWO PRINCIPAL COMPONENTS FROM  
THE DELTA PROGRAMME



KEY: ELEMENTS (*)	CONSTRUCTS (->)
OWN Own (ESN or Nor.) child	CM Can make up own mind
N Normal child	H Helpful
O Older child	F Friendly
Y Younger child	R Responsible
DD Dare Devil child	I Independent
G Good child	C Calm
LA Liked Adult	SH Sense of Humour
P Problem child	PO Positive
M Mature child	U Understanding
DA Disliked adult	PR Practical

a) Comparison of the component space with regard to constructs

Figure 7.07 shows the differences along the two principal components between the mothers grids (ESN and N). The two principal components account for 48.9 % and 17.8 % of the component space respectively. Thus just over 33 % of the variation in the component space is unrepresented by the diagram. The third component accounted for 11.9 % of the variation.

The degree of correlation between the two grids was high (.88), i.e. mothers used the constructs with these elements in generally very much the same manner. The list of correlations between the mothers' use of individual constructs shows high agreement - the lowest with regard to positive (.72) and the highest with regard to friendly (.96). It would seem therefore that within the context of this grid mothers were using the constructs in a very similar way (Table 7.19).

TABLE 7.19

CORRELATIONS BETWEEN CONSTRUCTS IN MOTHERS - ESN AND MOTHERS - N GRID

CONSTRUCTS	CORRELATIONS
Can Make up Own Mind	.78
Helpful	.92
Friendly	.96
Responsible	.94
Independent	.83
Calm	.93
Sense of Humour	.78
Positive	.72
Understanding	.95
Practical	.90

b) Comparison between the way ESN (M) and normal children are construed by their own mothers

The position of OWN Child in Figure 7.07 indicates that along the major component there was a considerable difference between the way mothers construed their own ESN (M) or Normal children.

TABLE 7.20

GRID OF DIFFERENTIAL CHANGES BETWEEN ELEMENTS ON EACH CONSTRUCT  
IN MOTHERS - ESN AND MOTHERS - N GRID

(Allowance is made for any general tendency for the gradings of the elements to change up or down between the two grids.)

CONSTRUCTS	ELEMENTS									
	OWN	NOR	OLD	YOUNG	DARE	GOOD	L.A.	PROB	MAT	D.A.
Makes/mind	-.68	.56	-.43	-.34	.26	.52	.31	-.45	-.01	.25
Helpful	.03	.12	.19	-.56	.40	.22	-.08	-.71	.07	.28
Friendly	-.09	.20	-.34	-.38	-.03	.25	.28	.11	.21	-.23
Responsible	-.35	-.14	.17	.11	.64	.19	-.18	-.26	-.32	.15
Independent	-.71	.26	.13	.16	.22	.21	.10	.09	-.41	-.05
Calm	.25	-.19	.27	.20	.17	.03	.05	-.14	-.42	-.22
Humour	-.47	-.20	-.29	.31	1.03	-.08	-.18	-.14	.19	-.17
Positive	-.87	.47	.34	.10	.76	.30	-.42	-.22	-.19	-.28
U/standing	-.18	-.24	-.07	.16	.15	.52	.17	-.37	.20	-.35
Practical	-.69	.06	.14	.41	.06	.43	-.14	-.10	-.13	-.05
TOTAL	-3.72	.90	.11	.18	3.67	2.61	-.09	-2.19	-.79	-.67
Percentage	23.7	7.3	6.1	8.5	21.4	9.2	4.4	9.2	5.6	4.5
Sign Test	N.S.	N.S.	N.S.	N.S.	*	*	N.S.	N.S.	N.S.	N.S.
Key: - = Mothers of ESN (M) children rate lower than mothers of normal children OWN= Own child (ESN or Normal): NOR=Normal child: OLD=Older child: YOUNG=Younger child: DARE=Dare Devil child GOOD=Good child: L.A.=Liked adult: PROB=Problem child: MAT=Mature child: D.A.=Disliked adult  * = P<0.05 (two tail): N. S. = Not significant										

Turning to the table of differential changes (Table 7.20) which takes into account the remaining 33% of the component space, it will be seen that both the dare devil and mothers' own children are construed very differently, contributing to 21.4% and 23.7% of the grids' total variation respectively. Dare devil children are seen to be consistently rated as more mature by mothers of normal children than by mothers of ESN (M) children (Sign test). In contrast good children were rated as consistently more mature by mothers of ESN (M) children than by mothers of normal children, although this difference was not large.

However, the sign test was non-significant for OWN children, because on 2 of the 10 constructs mothers rated ESN (M) children a little higher than Normal children (helpful: .03) and (calm: .25). Elsewhere they were perceived as less mature than Normal children. Thus, although mothers may see their own ESN (M) children in more positive terms than do their teachers, it does not necessarily mean that they will perceive them to be as decisive and as independent as Normal children.

#### Summary

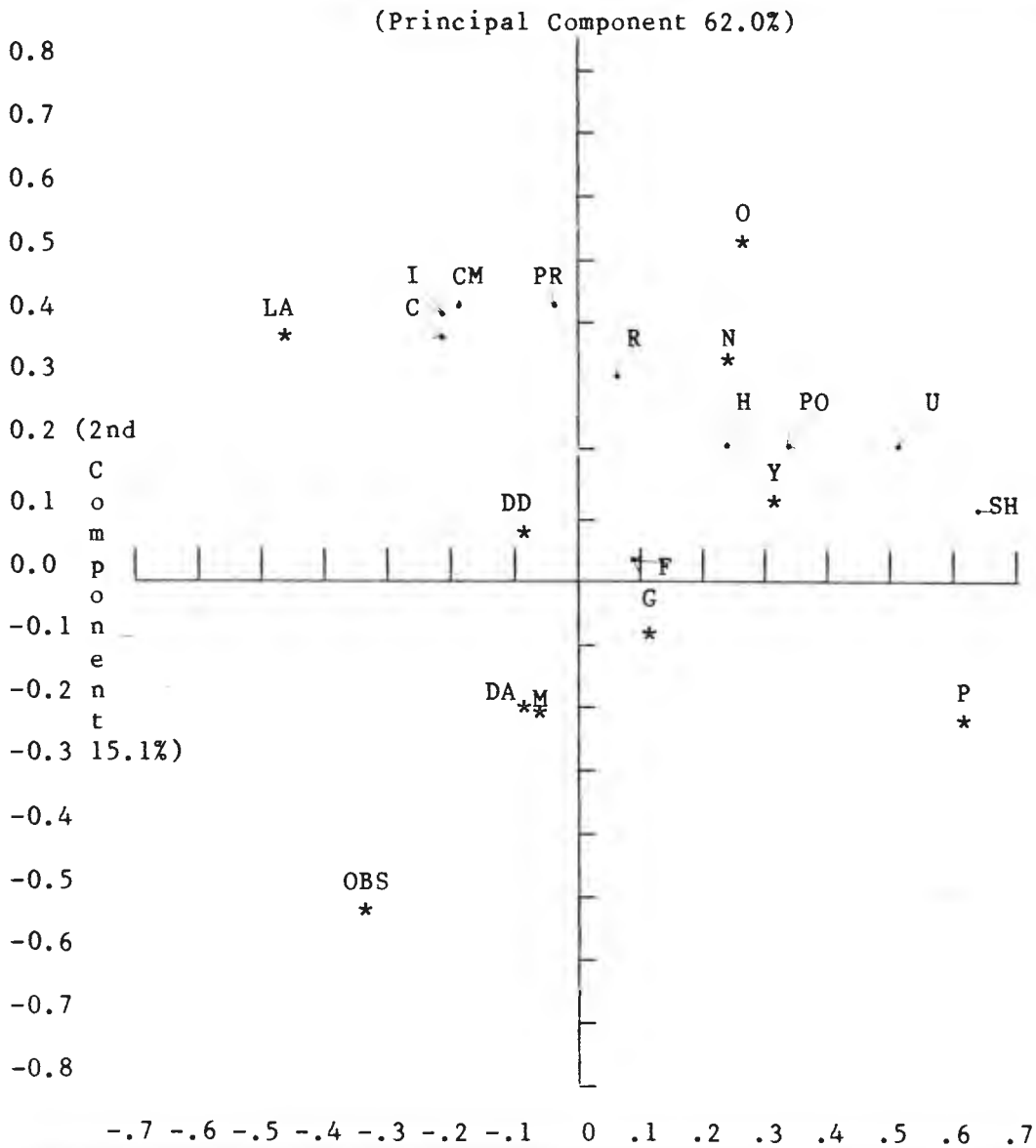
In that mothers used the constructs in a similar way, the difference between the way that ESN (M) and Normal were perceived by their own mothers caused more variation between the grids than did any other elements. Although mothers of ESN (M) children see them as being calmer than Normal children, and also as friendly and as helpful, in all other respects ESN (M) children appear to be seen as less mature than the Normal group of children, particularly in terms of being dependent, impractical and negative. In this respect, it is worth emphasizing that the average age of the Normal group of children was 13 years, but that of the ESN (M) children was 13 years 6 months. Thus the difference in perceived maturity cannot be related to the children's age.

#### 7.7.4 Teachers of ESN (M) and Normal Children - Teachers - ESN and N Grids

The fourth comparison in the main results was to see if teachers of ESN (M) and Normal children construed children differently, and if so to what degree. [Element No. 1 in this analysis is called OBS CHILD, i.e. the two groups of children who were observed in their classroom with their teachers].

FIGURE 7.08

DIFFERENCES IN THE TEACHERS - ESN AND TEACHERS - N GRIDS  
 PLOTTED ALONG THE TWO PRINCIPAL COMPONENTS FROM  
 THE DELTA PROGRAMME



KEY: ELEMENTS

- OBS Observed child
- N Normal child
- O Older child
- Y Younger child
- DD Dare Devil child
- G Good child
- LA Liked Adult
- P Problem child
- M Mature child
- DA Disliked adult

CONSTRUCTS

- CM Can make up own mind
- H Helpful
- F Friendly
- R Responsible
- I Independent
- C Calm
- SH Sense of Humour
- PO Positive
- U Understanding
- PR Practical



a) Comparison of the component space with regard to constructs

From Figure 7.08 it is possible to see that the two main components account for 62.0 % and 15.1 % respectively. Thus just under 23 % of the component space is unrepresented in the diagram. The third component accounted for 8.1 % of the variation in the grid.

The general degree of correlation between the two grids was .70. Although not as high a correlation as between the other three pairs of grids, there is still a considerable degree of similarity in the way that teachers of ESN (M) and teachers of Normal children used the constructs to evaluate elements.

The list of correlations between constructs shows that there is a range of agreement between how the two sets of teachers use individual constructs from the lowest which is can make up own mind ( $r = .37$ ) to the highest where helpful, responsible and understanding all positively correlate ( $r = .84$ ).

TABLE 7.21

CORRELATIONS BETWEEN CONSTRUCTS IN TEACHERS - ESN AND  
TEACHERS - N GRID

CONSTRUCTS	CORRELATIONS
Can Make up Own Mind	.37
Helpful	.84
Friendly	.80
Responsible	.84
Independent	.45
Calm	.67
Sense of Humour	.71
Positive	.66
Understanding	.84
Practical	.64

b) Comparison between the way ESN (M) and Normal children are  
construed by their teachers

The position of the OBS child in Figure 7.08 towards the periphery of the diagram, indicates that teachers of ESN (M) and Normal children construed the children who were observed in their classes in quite different ways. The kind of adults they like, and older and problem children also appear to be construed differently.

TABLE 7.22

GRID OF DIFFERENTIAL CHANGES BETWEEN ELEMENTS ON EACH CONSTRUCT  
IN TEACHERS - ESN AND TEACHERS - N GRID

(Allowance is made for any general tendency for the gradings of the elements to change up or down between the two grids.)

CONSTRUCTS	ELEMENTS									
	OBS	NOR	OLD	YOUNG	DARE	GOOD	L.A.	PROB	MAT	D.A.
Makes/mind	-1.03	1.06	.56	.23	.22	.35	.60	-1.01	-.23	-.75
Helpful	-.53	.12	.50	.25	.39	-.00	.25	.12	.05	-1.15
Friendly	-.07	.09	.48	-.02	.11	.27	-.84	-.44	.19	.22
Responsible	-.76	.57	.87	.06	.22	-.52	.30	-.11	-.38	-.25
Independent	-1.12	.69	.73	.01	.32	-.65	.93	-.67	-.37	.13
Calm	-.43	.48	.96	-.17	.03	-.18	.54	-.71	-.59	.08
Humour	-.72	-.01	.47	.39	-.51	.27	-.43	.85	-.18	-.12
Positive	-1.02	-.38	.49	.50	.02	.06	.45	.17	-.13	-.17
U/standing	-.83	.24	.74	.60	.36	-.14	-.54	.18	-.64	.02
Practical	-.90	.53	.97	.17	-.22	-.33	.93	-.32	-.41	-.42
TOTAL	-7.38	3.40	6.75	2.02	.94	-.88	2.12	-1.94	-2.70	-2.42
Percentage	23.3	9.7	18.0	3.4	2.9	4.1	14.3	11.2	4.9	8.2
Sign Test	*	N.S.	*	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
<p>Key: - = Teachers rate ESN (M) lower than normal children</p> <p>OBS= Observed child: NOR=Normal child: OLD=Older child            YOUNG=Younger child: DARE=Dare Devil child: GOOD=Good child            L.A.=Liked adult: PROB=Problem child: MAT=Mature child:            D.A.=Disliked adult</p> <p>* = P&lt;0.05 (two tail): N. S. = Not significant</p>										

Table 7.22 shows that although both older children and liked adults contributed to 18.0 % and 14.3 % of the grid variation, the greatest percentage was for the observed children (23.3%). It will be seen that on all constructs, teachers of ESN (M) children saw their ESN (M) pupils (observed children) as less competent than teachers of Normal children rated their Normal (observed) pupils (sign test = P<0.05). On the other hand teachers of ESN (M) children saw older children as generally more mature than did teachers of Normal children (P<0.05).

In particular, ESN (M) children were seen as considerably less decisive (-1.03), independent (-1.12), positive (-1.02) and practical (-.90) than Normal children by their teachers. These were the same four constructs on which mothers rated ESN (M) as least competent than Normal children (Table 7.19). Teachers did not see any real difference between ESN (M) and Normal children in terms of their friendliness (-.07), as was reflected in the grid comparing mothers' of ESN (M) and Normal children.

As in the case of the mothers' comparative grid, it should be remembered that there was only partial agreement in the way both groups of teachers used the construct - can make up own mind. Teachers also did not agree strongly on their use of independent ( $r = .45$ ). This means that on both those constructs on which ESN (M) and Normal children were seen as considerably different by their teachers, some of the variation may well be accounted for by their teachers' different use of the construct.

## 7.8 Subsidiary Results

Because the ESN (M) and Normal (contrast) children were not matched, it was felt that DELTA programs should be run on two variables - the children's sex and their socio-economic class.

### 7.8.1 Children's Sex

After SERIES programs were run, DELTA analyses were carried out to see if mothers or teachers construed ESN (M) and Normal boys and girls differently.

It was found that mothers and teachers consistently construed Normal and ESN (M) boys differently. They only consistently construed ESN (M) girls differently. Even so the percentage of the variation which these differences contributed to the whole variation in the grid was extremely small on every occasion. Table 7.23 below gives the results of the sign test (on consistent differences in the way boys or girls were perceived across all ten constructs); who was construed as more mature; and the percentage of the variation to which these differences contributed to the whole variation in the grid.

As will be seen, where there was a difference, it was that mothers construed children as more mature than did teachers. However,

TABLE 7.23

THE EFFECT OF CHILDREN'S SEX ON THE WAY MOTHERS AND TEACHERS  
PERCEIVED ESN (M) AND NORMAL BOYS AND GIRLS

		MOTHERS OF ESN (M) CHILDREN N = 9			TEACHERS OF NORMAL CHILDREN N = 8		
		Sign. Test	% of Variation	Direc- tion	Sign. Test	% of Variation	Direc- tion
B O Y S	MOTHERS OF NORMAL CHILDREN N = 8	N.S.	.06%	-	<0.01	.09%	Mas.
	TEACHERS OF ESN (M) CHILDREN N = 9	<0.05	.32%	Mas.	N.S.	.15%	-
G I R L S	MOTHERS OF NORMAL CHILDREN N = 10	N.S.	.16%	-	N.S.	.14%	-
	TEACHERS OF ESN (M) CHILDREN N = 10	<0.05	.17%	Mas.	N.S.	.07%	-
		NORMAL BOYS N = 8			ESN (M) GIRLS N = 10		
M O T H E R S	ESN (M) BOYS N = 9	N.S.	.06%	-	N.S.	.10%	-
	NORMAL GIRLS N = 10	N.S.	.30%	-	N.S.	.16%	-
T E A C H E R S	ESN (M) BOYS N = 8	N.S.	.16%	-	N.S.	.12%	-
	NORMAL GIRLS N = 10	N.S.	.14%	-	N.S.	.07%	-
KEY: Mas. = Mothers think group of children more mature than do teachers Sign test = two tail N.S. = No significant difference							

TABLE 7.24

THE EFFECT OF CHILDREN'S SEC ON THE WAY MOTHERS AND TEACHERS  
PERCEIVED ESN (M) AND NORMAL BOYS AND GIRLS

C L A S S		MOTHERS OF ESN (M) CHILDREN N = 15			TEACHERS OF NORMAL CHILDREN N = 8		
		Sign. Test	% of Variation	Direc- tion	Sign. Test	% of Variation	Direc- tion
W O R K I N G	MOTHERS OF NORMAL CHILDREN N = 8	N.S.	.18%	-	N.S.	.14%	-
	TEACHERS OF ESN (M) CHILDREN N = 15	<0.05	.31%	Mas.	N.S.	.10%	-
M I D D L E		MOTHERS OF ESN (M) CHILDREN N = 4			TEACHERS OR NORMAL CHILDREN N = 10		
	MOTHERS OF NORMAL CHILDREN N = 10	N.S.	.08%	-	<0.01	.62%	Mas.
	TEACHERS OF ESN (M) CHILDREN N = 10	<0.01	.15%	Mas.	N.S.	.07%	-
		W/C NORMAL CHILDREN N = 8			M/C ESN (M) CHILDREN N = 4		
M O T H E R S	ESN (M) W/C CHDN. N = 15	N.S.	.18%	-	N.S.	.03%	-
	NORMAL M/C CHDN. N = 10	N.S.	.43%	-	N.S.	.08%	-
T E A C H E R S	ESN (M) W/C CHDN. N = 15	N.S.	.10%	-	N.S.	.16%	-
	NORMAL M/C CHDN. N = 10	N.S.	.13%	-	N.S.	.07%	-
<p>KEY: Mas. = Mothers think group of children more mature than do teachers Sign test = two tail N.S. = No significant difference</p>							

there was no difference at all in the way boys and girls were construed using these constructs. In view of the fact that the percentage of the variation contributed by mothers and teachers having different perceptions of the observed ESN (M) and Normal boys, and ESN (M) girls was so small, no further discussion will take place. One must conclude that it is not along any of these constructs that mothers and teachers see major differences between boys and girls, whether they are normal or ESN (M).

#### 7.8.2 Children's Socio-Economic Class

After SERIES programs were run, DELTA analyses were carried out to see if mothers or teachers construed children from socio-economic classes differently (working and middle class).

As with the children's sex, it was found that there were few differences. Mothers construed ESN (M) working and middle class children, and middle class Normal children differently from teachers. Apart from this there were no other differences. As Table 7.24 illustrates, despite mothers consistently perceiving children (except working class Normal children) as more mature than did teachers, the difference contributed to only a small percentage of the total variation in the grid.

The negligible percentage of the total variation in the grid to which comparative groups of children from working or middle classes were perceived is clearly seen in Table 7.24. These constructs are, therefore, evidently not those which mothers or teachers would use to differentiate middle from working class children. In view of this, no further discussion of the effects of class on the mother's or teachers' grids will take place.

#### 7.9 Summary

The ten constructs used in the repertory grids in this study had been selected and piloted as representing various facets of social maturity. The strength of the first principal component in all four of the INGRID analyses; the positive correlation of all constructs to each other in three of the grids (and almost all in the fourth grid - Teachers - N Grid), and the placement of children and adults along the first principal component, gives evidence that mothers and teachers tended to use the constructs as

a measure of maturity. When looking at the scatter of elements in the component space, it would also seem that mature people were liked; and immature and problematic people were disliked.

It was along the constructs friendly and independent that mothers and teachers of ESN (M) children differentiated ESN (M) children from other children and adults, seeing the children as dependent, and friendly (mothers) or helpful (teachers). Mothers and teachers of Normal children placed the Normal (observed) children nearer the centre of the grid, indicating that they did not construe Normal children particularly strongly along any of the constructs.

Results from the four DELTA programmes indicate that mothers and teachers of ESN (M) and Normal children perceive ESN (M) children differently from Normal children. In addition, although there is only a negligible difference in the way that mothers and teachers perceive the same Normal children, mothers and teachers of ESN (M) children differ significantly in how they perceive the same ESN (M) children.

Table 7.25 below lists whether mothers or teachers consistently thought ESN (M) or Normal children were more mature (sign test); and the percentage of variation in the grid to which each of these differences contributed.



TABLE 7.25

CONSISTENT DIFFERENCES IN HOW OBSERVED (ESN [M]/NORMAL)  
CHILDREN WERE CONSTRUED: AND PERCENTAGE OF THE VARIATION IN THE  
GRID TO WHICH THESE DIFFERENCES CONTRIBUTED

	MOTHERS OF ESN (M) CHILDREN		TEACHERS OF NORMAL CHILDREN	
	Sign Test	% of Variation	Sign Test	% of Variation
TEACHERS OF ESN (M) CHILDREN	P<0.01	20.2	P<0.1	23.3
MOTHERS OF NORMAL CHILDREN	N.S.	23.7	N.S.	2.6

Assuming that the constructs in the grid were indeed measures of maturity, it is evident that although mothers perceived their ESN (M) children as more mature than did teachers, this does not mean that they will perceive them as being as mature as Normal children of the same age. Although they did not consistently (sign test) see their ESN (M) children as less mature on all constructs than mothers of Normal children perceived their own children, the difference in the way they construed their own children contributed to 23.7% of the variation in the grid, considerably more than any other child or adult.

In general, those constructs on which there was most variation in the comparisons were Can make up own mind, Independent, Practical and Positive. ESN (M) children were seen as more dependent, impractical, negative and indecisive than Normal children generally. Although there was a general tendency for the constructs as a whole to be used in the same way, teachers of normal children did not use the construct 'can make up own mind' in a similar manner to either mothers of Normal children, or teachers of ESN (M) children. This has to be borne in mind when one considers the difference in the way teachers construe ESN (M) and Normal children on this construct.

Because the ESN (M) and Normal (target) children were not matched, it is possible that other factors might have been instrumental in

the differences between mothers' and teachers' grids. Two variables were considered, the children's sex and their socioeconomic class (working or middle). In neither case did the variables contribute substantially to the grids' variation.

The significance of these results in connection with the two preceding sets of results (observations and questionnaires) will be discussed more fully in the "Discussion" after some links between the three sets of data have been considered.

## 8. RESULTS: LINKS BETWEEN SELECTED OBSERVATION CATEGORIES, CONSTRUCTS AND QUESTIONS

### 8.1 Introduction

The results in the previous sections have highlighted a number of interesting points.

Mothers and teachers did not construe ESN (M) children similarly in terms of the constructs provided. If these constructs can be taken to be aspects of social maturity, mothers construed ESN (M) children as more mature than did teachers. In particular the greatest difference between mothers' and teachers' construing of these children appeared to be in terms of the constructs Independence/Dependence and Can make up own mind/Cannot make up own mind. There was less disagreement over children's friendliness and understanding, which were highly correlated in both the mothers' and teachers' grids.

However, comparing the average grids of mothers of ESN (M) and of Normal children, ESN (M) children were construed as less mature than Normal children. Thus although mothers saw their ESN (M) children as more mature than did teachers, this did not mean to say that they saw them as mature as Normal children.

The observations of ESN (M) and Normal children at home or at school showed that, in terms of their verbal behaviour, the way ESN (M) children behaved at home did not correlate at all with how they behaved at school. In other words, there was no way that teachers could predict the type of verbal behaviour ESN (M) children displayed at home from the type of verbal behaviour they displayed at school. At the same time, there were few correlations between the type of verbal and non-verbal behaviour children experienced from their mothers at home and their teachers at school. There were only a few correlations between ESN (M) children's non-verbal behaviour at school and at home.

ANOVA of each sub-category of behaviour by the location (home or school) and status (ESN [M] and Normal) revealed that overall ESN (M) children received and exhibited more verbal control and resistance than did Normal children. Observations between mothers (or teachers) and Normal children, on the other hand, indicated

that Normal children were more likely to be involved in interactions which involved significantly more care, initiation or acceptance than were ESN (M) children.

Results from the questionnaire did not appear very clear cut. However, less than a third of all mothers' and teachers' assessments of ESN (M) children correlated. This was despite the fact that comparing the way they rated ESN (M) children as a group showed that in all but a few cases they did not significantly differ. In other words, they generally agreed in how they rated ESN (M) children as a group, but not over which children were considered competent etc.

Looking at all these results together, it appears that there may be a link between the lack of agreement in construing the ESN (M) children (repertory grids), and assessing their specific abilities (questionnaires), and how mothers and teachers interact differently with these ESN (M) compared to Normal children.

There are a great number of possible links between the three data sets, but I shall concentrate on just a few of the results, with reference to ESN (M) children only.

The constructs, questions and behaviour categories which were chosen were those that were felt to be most central to the focus of this study, namely independence and social skills.

## 8.2 Independence and Control

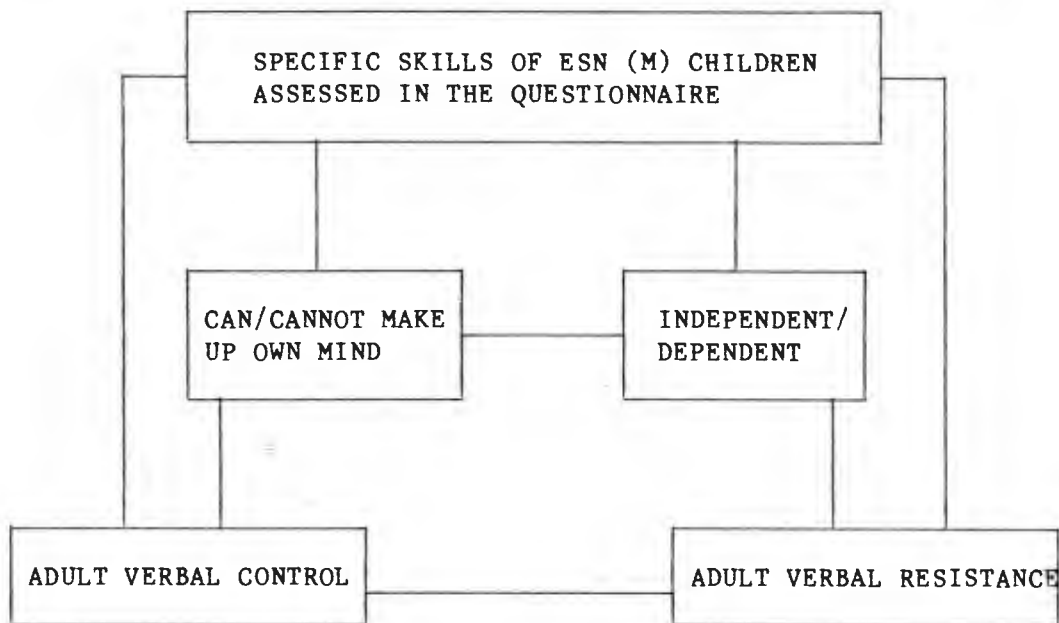
The constructs INDEPENDENCE/DEPENDENCE and CAN/CANNOT MAKE UP OWN MIND, which were closely correlated (Tables 7.01 and 7.05) were chosen as being important areas to explore. At the same time, ESN (M) children had been observed to be involved in more interactions than the Normal sample where Control and Resistance were predominant. Similarly, a number of questions in the questionnaire were concerned with specific Independence skills and Autonomy.

Referring back to the model of causal links between attitudes and behaviour at the beginning of the literature review (Figure 2.01), it is possible to redraw the model in different terms to link the various data bases in the present thesis. Diagram 8.01 shows the possible links between the constructs INDEPENDENCE/DEPENDENCE and CAN/CANNOT MAKE UP OWN MIND (over which there was most

disagreement between mothers and teachers of ESN [M] children),  
ADULT VERBAL CONTROL AND RESISTANCE.

FIGURE 8.01

MODEL SHOWING POSSIBLE LINKS BETWEEN  
INDEPENDENCE/DEPENDENCE, CAN/CANNOT MAKE UP OWN MIND  
ADULT VERBAL CONTROL AND RESISTANCE AND CHILDREN'S PERCEIVED  
ABILITY IN SPECIFIC SKILLS ASSESSED IN THE QUESTIONNAIRE



It seems important to try to establish these links and the strength of their relationship, for although no causal inferences can be made where there are significantly high correlations, it may be possible to understand why parents and teachers do not agree, or appear to agree in assessing ESN (M) children when they are asked certain specific questions, nor when they are asked to construe the same children more generally.

Table 8.1 lists the correlations between Independence, Can make up own mind, mothers' Verbal Control and Resistance, and a number of selected questions from sections on Practical Self-Care, Independence, Unexpected or Crisis Situations, and Occupation.

TABLE 8.1

LIST OF CORRELATIONS BETWEEN INDEPENDENCE/DEPENDENCE, CAN/CANNOT MAKE UP OWN MIND, ADULT VERBAL CONTROL, ADULT VERBAL RESISTANCE AND SELECTED QUESTIONS FOR MOTHERS OF ESN (M) CHILDREN

(1)	INDEPEND- ENT (2)	MAKES UP OWN MIND (3)	CONTROL (4)	RESIST- ANCE (5)
INDEPENDENCE	-	.88** (19)	.10 (16)	.34 (15)
Can make up OWN MIND		-	0 (16)	.31 (15)
Adult Verbal CONTROL			-	.73**(19)
Sense spending pock.money	.35* (19)	.33* (19)	.36* (16)	.33 (15)
<u>Shops alone</u>	.02 (19)	-.03 (19)	-.39 (16)	-.21 (15)
Competency in shopping	.23 (18)	.36* (18)	-.28 (15)	-.07 (14)
Freq. making hot drink	.34* (19)	.07 (19)	.08 (16)	.26 (15)
Compet. making hot drink	-.04 (19)	-.02 (19)	.03 (16)	.08 (15)
Freq. cooking snack	.32* (19)	.13 (19)	-.05 (16)	.26 (15)
Compet. cooking snack	-.08 (17)	.08 (17)	.24 (14)	.35 (13)
<u>Travelling short distance</u>	.27 (19)	.29 (19)	-.36 (16)	-.05 (15)
Compet. travelling s.d.	.26 (16)	.26 (16)	-.16 (14)	.11 (13)
<u>Travelling longer dist.</u>	.50**(19)	.29 (19)	.19 (16)	.32 (15)
Compet. travelling l.d.	.48* (12)	.56**(12)	.02 (11)	.24 (10)
Has own front door key	.61**(19)	.69**(19)	-.32 (16)	0 (15)
Goes out with ma in even.	-.43 (19)	-.19 (19)	.23 (16)	-.07 (15)
Goes out alone in evening	-.07 (19)	.09 (19)	.27 (16)	.23 (15)
Out with friends in even.	-.19 (19)	.09 (19)	.25 (16)	.21 (15)
Belongs to a club	-.40 (19)	-.21 (19)	.06 (16)	-.12 (15)
Is left alone at home	-.07 (19)	.01 (19)	-.20 (16)	-.03 (15)
Time can be left alone	.08 (18)	.28* (18)	-.08 (15)	.06 (15)
<u>Plays alone near home</u>	.16 (19)	.41* (19)	-.32 (16)	-.05 (15)
<u>Plays alone far from home</u>	.16 (19)	.24 (19)	-.31 (16)	-.04 (15)
Copes with pract. Probs.	-.01 (19)	.17 (19)	0 (16)	.20 (15)
Copes when separated	-.17 (19)	.18 (18)	-.14 (16)	-.31 (15)
Need for praise/approval	.35* (19)	.25 (19)	.13 (16)	.20 (15)

Key: \* = P<0.05: \*\* = P<0.01: ( )=N

Questions underlined = mothers' and teachers assessment correl

Note: In this and all subsequent tables in this section:

Low scores on Constructs = competent

High scores on Constructs = incompetent

Low scores on Questions = competent

High scores on Questions = incompetent

Low scores on Behaviour Categories = less observed behaviour

High scores on Behaviour categories = more observed behaviour

It will be seen that although there is a high correlation between Independent and Can Make up own mind ( $r = .88$ ); and Verbal Control and Resistance ( $r = .73$ ), there are no significant correlations

between the constructs Independent or Can make up own mind and controlling or resisting behaviour. In other words, irrespective of how a mother construed a child in terms of being dependent or indecisive, this did not appear to affect whether she told him off or told him what to do more frequently. Conversely children who were told what to do more frequently, were not necessarily judged as being dependent or unable to make up their own minds.

It was hypothesised that those children who received more control or resistance would be rated as less competent on specific skills relating to these constructs. Table 8.01 shows that this was generally not the case. Observations of the amount of maternal Verbal Resistance did not correlate at all with whether mothers allowed children to shop alone, make hot drinks and cook, travel alone, go out in the evening, play alone, or deal with minor crises, nor anticipate how well they would assess children's competency at these skills.

The same is true with regard to observations of maternal Verbal Control, with the exception of children spending pocket money sensibly. Here, those children who were told what to do less often by their mothers were likely to be seen as spending their pocket money more sensibly ( $\tau = .36; P < 0.05; N = 16$ ). It is more likely that this single result occurred by chance in view of the lack of further significant results.

It was also hypothesised that those children construed as Independent or Decisive would be rated positively on a number of specific skills relating to autonomy, self-sufficiency and the ability to cope with personal crises. This was only partially confirmed. Column 1 of Table 8.01 shows that there were correlations between how mothers construed ESN (M) children in terms of Independence and various skills. It appears that if a mother construed a child as Independent, she was also likely to think he spent his pocket money sensibly ( $\tau = .35; P < 0.05; N = 19$ ); was more likely to make a hot drink for himself ( $\tau = .34; P < 0.05; N = 19$ ) and cook himself a snack fairly frequently ( $\tau = .32; P < 0.05; N = 19$ ), although there was no correlation between Independence and his competency to cook etc. He was also more likely to travel alone ( $\tau = .50; P < 0.01; N = 19$ ) and be seen to be more competent at doing so for distances over half an hour ( $\tau = .48; P < 0.05; N = 12$ ); have his

own front door key ( $\tau = .61$ ;  $P < 0.01$ ;  $N = 19$ ); and need less praise or encouragement to complete a task ( $\tau = .35$ ;  $P < 0.05$ ;  $N = 19$ ).

Interestingly, there appears to be no correlation between children's ability to occupy themselves alone either at home or outside, and whether they are considered Independent/Dependent. It might perhaps have been expected that more independent children would have been left alone for longer periods, and played alone more frequently, but this was not the case.

Looking at the correlations between how mothers construed children's ability to make up their own minds, and the same questions, those children whom mothers construed as being most able to make up their own minds, were likely to be seen as spending their pocket money more sensibly ( $\tau = .32$ ;  $P < 0.05$ ;  $N = 19$ ); being more competent at doing the shopping ( $\tau = .36$ ;  $P < 0.05$ ;  $N = 18$ ) and travelling longer distances alone ( $\tau = .56$ ;  $P < 0.01$ ;  $N = 12$ ); having their own front door key ( $\tau = .69$ ;  $P < 0.01$ ;  $N = 19$ ); being left alone at home ( $\tau = .28$ ;  $P < 0.05$ ;  $N = 18$ ) for longer periods of time; and being more likely to play by themselves in the close proximity to the home ( $\tau = .41$ ;  $P < 0.05$ ;  $N = 19$ ).

Put another way, those children who were seen as spending their pocket money sensibly were likely to be construed as more independent and decisive, and were less likely to be told what to do by their mothers. If they were thought competent at travelling alone for distances of over half an hour's duration, or allowed to have their own front door key, it is likely that mothers would also construe them as independent and decisive.

Turning to the same set of data (with the exception of those questions which were not in the teacher's questionnaire) for the teachers of ESN (M) children, Table 8.02 gives a breakdown of the results, and indicates those correlations which were significant.



TABLE 8.2

LIST OF CORRELATIONS BETWEEN INDEPENDENCE/DEPENDENCE, CAN/CANNOT  
MAKE UP OWN MIND, ADULT VERBAL CONTROL, ADULT VERBAL RESISTANCE  
AND SELECTED QUESTIONS FOR TEACHERS OF ESN (M) CHILDREN

(1)	INDEPEND- ENT (2)	MAKES UP OWN MIND (3)	CONTROL (4)	RESISTANCE (5)
INDEPENDENCE	-	.83**(19)	.17 (19)	.16 (14)
Can make up OWN MIND		-	.15 (19)	-.03 (14)
Adult Verbal CONTROL			-	.70**(19)
<u>Shops alone</u>	.52* (15)	.39 (16)	.05 (15)	.25 (12)
<u>Competency in shopping</u>	.33* (17)	.33* (17)	-.10 (17)	-.09 (12)
<u>Freq. making hot drink</u>	.18 (12)	.22 (12)	.20 (12)	.37 (10)
<u>Compet. making hot drink</u>	.26 (18)	.29* (18)	.13 (18)	.46**(13)
<u>Freq. cooking snack</u>	.24 (17)	-.08 (17)	-.40* (17)	-.09 (12)
<u>Compet. cooking snack</u>	.50**(18)	.37 (18)	.25 (18)	.28 (13)
<u>Travelling short distance</u>	.51* (17)	.32 (17)	.04 (17)	.25 (12)
<u>Compet. travelling s.d.</u>	.36* (19)	.37* (19)	.03 (19)	.08 (14)
<u>Travelling longer dist.</u>	.33 (13)	.47 (13)	0 (13)	-.20 (9)
<u>Compet. travelling l.d.</u>	.40* (17)	.54**(17)	-.10 (17)	-.19 (13)
<u>Time can be left alone</u>	.56**(19)	.35* (19)	-.08 (19)	-.09 (14)
<u>Plays alone near home</u>	.39 (12)	.03 (12)	.17 (12)	.54 (9)
<u>Plays alone far from home</u>	.32 (15)	-.18 (15)	-.33 (15)	.19 (12)
<u>Copes with pract. Probs.</u>	.24 (19)	.37* (19)	-.08 (19)	-.14 (14)
<u>Copes when separated</u>	.53**(19)	.31* (19)	.22 (19)	.14 (14)
<u>Need for praise/approval</u>	.24 (19)	.22 (19)	.28 (19)	.52**(14)
Key: * = P<0.05: ** = P<0.01: ( )=N Questions underlined: Mothers' and teachers' assessments correl.				

Despite the high correlations between the constructs Independent and Can make up own mind ( $r = .83$ ;  $P < 0.01$ ;  $N = 19$ ), and between observed Verbal Control and Resistance ( $r = .70$ ;  $P < 0.01$ ;  $N = 19$ ), there was no correlation between the two constructs and either Verbal Control or Resistance. This had also been found with mothers. Thus, the way children were construed along these constructs was not reflected in the amount of Control or Resistance they experienced from their teachers.

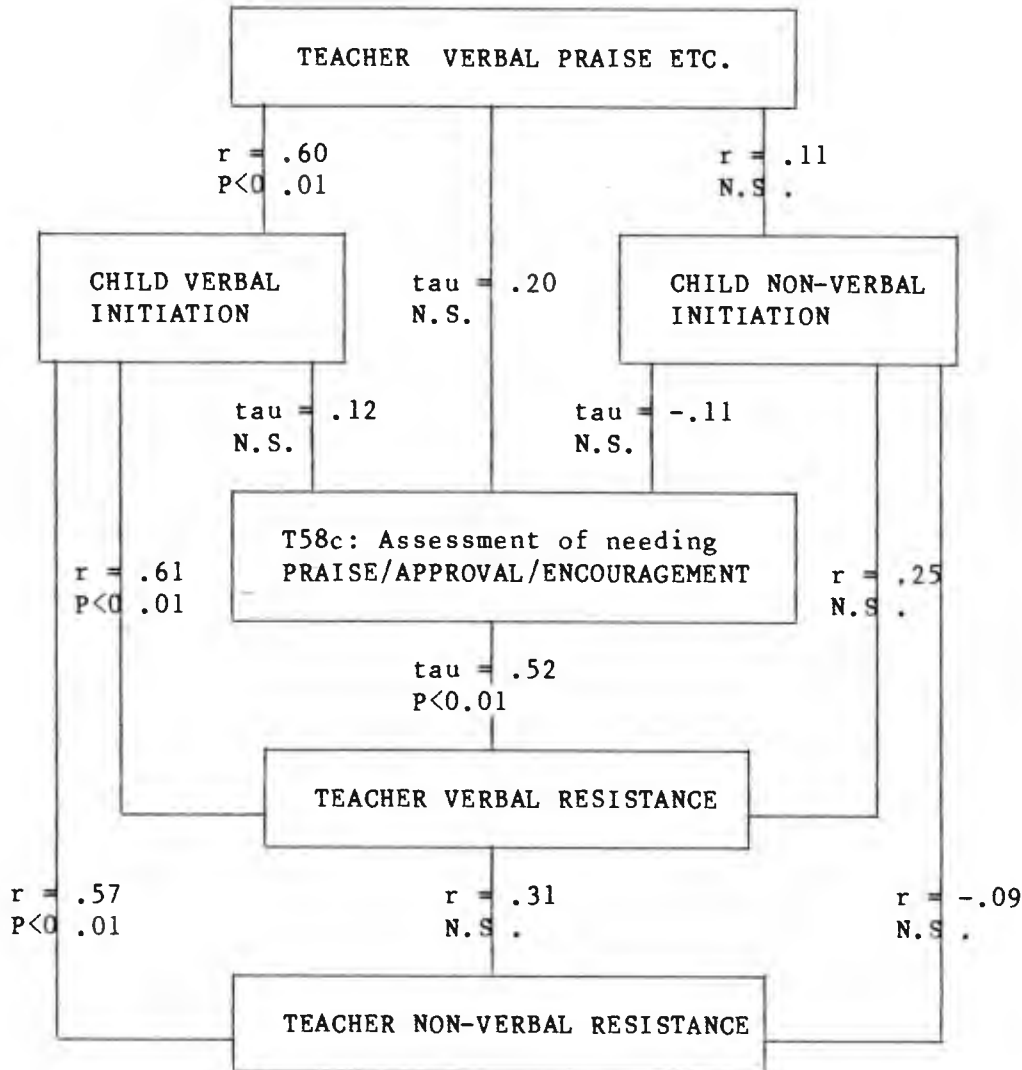
However, both these constructs, and the two observed behaviour sub-categories, correlated with a number of questions. With regard to the amount of Resistance teachers displayed towards ESN

(M) children, there were significant correlations with the children's assessed competency in making a hot drink ( $\tau = .46$ :  $P < 0.01$ :  $N = 13$ ) and the children's need for praise and approval ( $\tau = .52$ :  $P < 0.01$ :  $N = 14$ ). In other words, a child who was told off more often, was more likely to be assessed as needing help to make a hot drink and be seen as needing more praise and approval.

To explore this last point in some detail, it is possible to argue that while teachers were aware of which children asked more questions or tried to get their attention non-verbally, they were unable to give the necessary praise and encouragement these children requested because of demands from other children, and they therefore had to resist their pleas for help. Figure 8.02 illustrates. [Lines joining the boxes indicate those correlations tested, and the results straddling these lines show the correlation results and the level of significance.]

FIGURE 8.02

CORRELATIONS BETWEEN NEED FOR PRAISE, TEACHERS' VERBAL PRAISE,  
TEACHERS' VERBAL RESISTANCE, CHILDREN'S VERBAL AND NON-VERBAL  
INITIATION



There was no correlation between teachers' assessments of children needing more praise etc. and whether children asked for attention either verbally ( $\tau = .12$ : N.S.) or nonverbally ( $\tau = -.11$ : N.S.). The tables of correlations between behaviour sub-categories (Appendix 5.5) indicated that those children who asked more questions were told off more frequently ( $r = .61$ :  $P < 0.01$ ), although they also received more praise etc. ( $r = .60$ :  $P < 0.01$ ). It should be remembered that in fact virtually all types of teachers' verbal behaviour correlated with all types of child verbal behaviour at school.

However, there was no correlation between children being told off or resisted by their teachers, and children trying to get their

teachers' attention non-verbally ( $r = .25$ : N.S.). In addition, if children tried to get their teacher's attention non-verbally, they could not know whether or not to expect praise/encouragement ( $r = .11$ ; N.S.). There was a correlation between teacher non-verbal resistance (i.e. when teachers apparently ignored children) and child verbal initiation ( $\tau = .57$ :  $P < 0.01$ ).

The pattern that emerges is that children's requests for help related to teachers responding in three ways: either by praising them; by resisting them or by ignoring them. However, non-verbal initiation by a child (i.e. putting up one's hand or approaching the teacher) was unrelated to getting a predictable response from the teacher, although this did not relate to children being ignored.

In view of this, the lack of correlation ( $\tau = .20$ ) between those children who were assessed as needing more praise or approval in the questionnaire, and those children who in fact received more praise, chatter, encouragement etc from their teachers is an anomaly. There would seem to be no relationship between whether a child assessed as needing encouragement to finish a task and whether he would in fact receive it. There was a relationship between children who asked for attention and those who received a response, but not between those who non-verbally tried to get attention and those to whom their teachers would respond.

To return to correlations between Independence and Control etc. (table 8.02), there were no significant correlations between the amount of verbal control a child received from his teacher and the selected questions. [Contrary to prediction, children who were more frequently told what to do by teachers, were assessed to cook a meal for themselves more often ( $\tau = -.40$ :  $P < 0.05$ :  $N=17$ ), but in view of the lack of other correlations, this result may have occurred by chance.]

Teachers who construed ESN (M) children as more independent were likely to assess them as shopping alone ( $\tau = .52$ :  $P < 0.05$ :  $N=15$ ) and being more competent at shopping ( $\tau = .33$ :  $P < 0.05$ :  $N=17$ ); needing little or no help cooking ( $\tau = .50$ :  $P < 0.01$ :  $N=18$ ); travelling alone for short distances more frequently ( $\tau = .51$ :  $P < 0.01$ :  $N=17$ ) and being more competent at doing so ( $\tau = .40$ :

$P < 0.05$ :  $N=17$ ). They were also assessed as being able to be left alone for longer periods of time ( $\tau = .56$ :  $P < 0.01$ :  $N=19$ ) and as coping better if they were separated from the group/teacher during an outing ( $\tau = .53$ :  $P < 0.01$ :  $N=19$ ).

With the exception of children's competence at travelling longer distances alone, when mothers construed children as independent, they were not implying competence in those skills which were implied by teachers when they construed children as independent. This may account, in part, for the difference between mothers' and teachers' construing ESN (M) children as independent. In effect, when a mother said her child was independent, this would not necessarily indicate to the teacher the skills at which the mother might think her child was competent.

Column 3 (Table 8.2) gives the correlations between selected questions and the construct, Can make up own mind. Teachers who construed children as being able to make up their own minds were likely to assess children as being competent at shopping alone ( $\tau = .33$ :  $P < 0.05$ :  $N=17$ ), making a hot drink ( $\tau = .29$ :  $P < 0.05$ :  $N=18$ ), travelling for short ( $\tau = .37$ :  $P < 0.05$ :  $N=19$ ) or longer distances ( $\tau = .54$ :  $P < 0.01$ :  $N=17$ ), being left alone at home for long periods ( $\tau = .35$ :  $P < 0.05$ :  $N=19$ ), and coping better if separated when out ( $\tau = .31$ :  $P < 0.05$ :  $N=19$ ). It may be remembered that for mothers, being able to make up one's mind also correlated with competency to shop alone, travel alone for longer distances, and length of time the child could be left alone. Thus, in relation to these questions it would appear that when a teacher described a child as being decisive, a mother would infer only some of those skills at which the teacher considered the child was competent, but not all of them.

At the same time, it should be remembered that mothers and teachers differed more over construing ESN (M) children along the construct Can make up own mind than along any other construct in the grid. There will, of course, be many other skills not covered in the questionnaire, which would be inferred when children are described as being able to make up their own mind.

Another interesting point here is that there was not one question (of those selected) over which mothers and teachers agreed in

their assessments of ESN (M) children, and which also significantly correlated with either of the two constructs or two behaviour sub-categories for both mothers and teachers. Two examples will clarify the point.

Although mothers and teachers agreed in their assessment of which ESN (M) children were competent to travel alone for short distances, the ability to travel alone did not correlate with mothers' construing these same children as being independent or as being able to make up their own minds. However, teachers' assessments on this question did correlate with how they construed the children in terms of being independent and being able to make up their own minds.

Conversely, mothers and teachers did not agree as to which children were competent to travel longer distances alone, perhaps because teachers rated ESN (M) children as a group more competent at this task than did mothers. Yet, both mothers' and teachers' assessment of children as being incompetent to travel alone correlated with their construing children as being dependent and unable to make up his/her own mind. One might have expected that as mothers saw ESN (M) children as more independent and able to make up their own minds than did teachers, mothers would also have assessed ESN (M) children as a group as more competent at travelling alone than did teachers; but this was not the case.

This means that when a mother describes her child as more independent than does the child's teacher, the teacher cannot assume that the mother thinks the child capable of travelling alone. For although mothers consider independence related to an ability to travel alone, they also considered ESN (M) children as a group as less able to do so than did teachers.

All this points to the care which needs to be taken when mothers and teachers discuss ESN (M) children in terms of independence skills and constructs. Mothers construe ESN (M) children as a group as more independent and able to make up their own minds than do teachers. Yet mothers and teachers rarely agree on which children are competent at those skills which they separately see as reflecting independence and ability to make up one's mind. However, the children over which they agree on certain skills are

not those which both see as independent or able to make up one's own mind.

### 8.3 Friendly, Understanding and Verbal Care and Acceptance

It can perhaps be argued that it is because Can make up own mind and Independent were constructs along which there was most disagreement between mothers and teachers, that there were few correlations common to both mothers and teachers between these two constructs and various questions. Besides, mothers did not use the two constructs quite as widely as did teachers. Can make up own mind only accounted for 8.9 % of the variation in the mothers' grid (teachers: 10.0%), and Independent accounted for only 5.2% in the mothers' grid as opposed to 10.9 % in the teachers' grid.

It may, therefore, be more pertinent to look at two constructs over which there was some agreement between mothers and teachers, although they were more relevant to mothers than to teachers; and link these constructs with behaviour categories which contributed to a higher proportion of the total behaviour observed, and to a number of relevant questions. This second groups of constructs, observed behaviour and specific skills, which it was hypothesised would correlate, were those relating to social skills, the other main focus of the thesis. Specifically, it was hypothesised that there would be a relationship between the constructs Friendly and Understanding, Observed Verbal Care, and Acceptance, and those questions related to relationships and social sensitivity.

Table 7.2 from the results on repertory grids showed the correlations between mothers' construing of ESN (M) children and the constructs Friendly and Understanding were .58 and .42 respectively. ESN (M) children were more likely to be construed as friendly and understanding, than any of the other constructs supplied in the grid. In addition, mothers used friendly and understanding quite widely in judging children and adults in the grid. Friendly contributed to 13 % of the variation in the grid; understanding to 14.7 %.

On the other hand teachers did not construe ESN (M) children as particularly friendly or understanding. There were mild negative correlations between ESN (M) children and Friendly ( $r = -.17$ ) and Understanding ( $r = -.37$ ), i.e. teachers saw ESN (M) children as

not particularly friendly and not very sensitive towards or understanding of others. At the same time, teachers did not use these constructs as widely as did mothers. Together they represented only 17.4 % of the variation in the teachers' grid, friendly contributing 6.5 % and understanding 10.9 %. The apparent difference between mothers' construing of handicapped children as more friendly and understanding than did teachers, was confirmed in the Delta programme (Table 7.16). However, these differences were smaller than those between mothers' and teachers' construing of the children along the constructs Independent and Can make up own mind.

Overall, Verbal Care accounted for the largest proportion of adult verbal behaviour towards ESN (M) children at home and at school (Home = 45% : School = 40%). As it was thought likely that Verbal Care interactions might relate to mothers' and teachers' seeing ESN (M) children as friendly and understanding, Adult Verbal Care, Adult Verbal Acceptance and Child Verbal Care were correlated with Friendly and Understanding, and with a number of selected questions in the Social Awareness section of the questionnaire.

Table 8.3 lists the results of these correlations for mothers.



TABLE 8.3

LIST OF CORRELATIONS BETWEEN FRIENDLY/UNFRIENDLY, UNDERSTANDING/  
 INSENSITIVE, ADULT VERBAL CARE AND ACCEPTANCE, CHILD VERBAL CARE  
 AND SELECTED QUESTIONS FOR MOTHERS OF ESN (M) CHILDREN

(1)	FRIENDLY (2)	UNDER- STANDING (3)	ADULT VERBAL CARE (4)	ADULT VERBAL ACCEPT. (5)	CHILD VERBAL CARE (6)
FRIENDLY	-	.95**(19)	-.43**(19)	-.25 (15)	-.52* (18)
UNDERSTANDING		-	-.20 (19)	.13 (15)	-.05 (18)
Adult Verbal CARE			-	.43 (19)	.03 (19)
Adult ACCEPTANCE				-	.52* (19)
Close friend	.09(19)	.01 (19)	.23 (19)	.28 (15)	.04 (18)
Acquaintances	.23(19)	.30 (19)	-.28 (19)	-.05 (15)	.12 (18)
Keep/making friends	.14(17)	.05 (17)	.18 (17)	.14 (14)	.08 (16)
Getting on with:-					
<u>Known adults</u>	.12(19)	-.10 (19)	-.49**(19)	-.03 (15)	-.44* (18)
Unknown adults	.29(17)	-.07 (17)	-.45* (17)	-.14 (14)	-.37* (16)
Known children	-.01(19)	.13 (19)	.08 (19)	.16 (15)	.34 (18)
Unknown children	.27(18)	0 (18)	-.17 (18)	-.13 (14)	.03 (17)
Cooperation	.06(19)	.05 (19)	.22 (19)	.15 (15)	-.15 (18)
<u>Interrupting</u>	-.07(19)	.15 (19)	.24 (19)	.27 (15)	.08 (18)
<u>Sensitive of others</u>	-.09(19)	.16 (19)	-.10 (19)	-.15 (19)	-.03 (18)
<u>Judging others</u>	-.09(16)	-.11 (16)	.21 (16)	.09 (13)	.09 (15)
Sensitive to others	-.12(18)	.34*(18)	-.03 (18)	.33 (14)	.05 (17)
Takes turns/shares	-.07(19)	.10 (19)	.21 (19)	-.17 (15)	-.02 (18)
Praise/approval	.06(18)	.28 (18)	-.06 (18)	.16 (14)	.16 (17)
Key: * = P<0.05: ** = P<0.01: Questions underlined: Mother and teacher assessments correlated					

The results in the table above show that there was a strong correlation between the mothers' constructs of Friendly and Understanding ( $r = .95$ ;  $P < 0.01$ ;  $N = 19$ ). Mothers who construed their ESN (M) children as friendly were also very likely to chat, praise and encourage their children (Adult Verbal Care) ( $\tau = .43$ ;  $P < 0.01$ ;  $N = 19$ ), and in turn ESN (M) children who were construed as Friendly were more likely to talk (Child Verbal Care) to their mothers ( $\tau = -.52$ ;  $P < 0.05$ ;  $N = 18$ ). There was no significant relation between friendly and mothers' Verbal Acceptance of a child. When children were construed as Understanding there was no

relation with this and the amount of Verbal Care between the child and mother, nor with the mothers' Verbal Acceptance. There was no correlation between Adult Verbal Care and Adult Verbal Acceptance, and Appendices 5.5 and 5.6 show that ESN (M) children did not respond or appear to listen to mothers' chatter (i.e. there were no correlations between mothers' Verbal Care and Child Verbal or Non-Verbal Acceptance). However, mothers tended to agree with or respond to what children said ( $r = .52$ ;  $P < 0.05$ ;  $N = 19$ ).

This suggests that construing a child as friendly meant only that children and their mothers chatted to each other, but there was no relationship between children listening to or responding to their mothers and mothers' chatter.

These results may not appear as particularly remarkable until one looks at the lower section of the table. Here only 5 significant correlations are seen between any of the selected questions from the Social Awareness section and Friendly, Understanding, Adult Verbal Care and Acceptance, and Child Verbal Care.

First and foremost, there were no correlations at all between children who were construed by their mothers as Friendly in the repertory grids, and the answers mothers gave to questions on social awareness about the same children. When a mother construed her child as Friendly, she was not necessarily saying he/she had a close friend, or was popular; nor whether he/she was good at making and keeping friends, good at getting on with adults or children (either known or unknown). The mother was saying nothing about whether the child was co-operative, interrupted a lot, was sensitive about what others thought of him/her, was accurate in judging what others thought of him/her, or whether he/she in turn was sensitive of others' feelings. Nor was there any way of predicting if a child who was seen as Friendly by his/her mother would understand about taking turns and sharing.

The same is almost true of Understanding. The only correlation was between mothers' assessment of children as sensitive to others' feelings and mothers' construing the same children as being understanding ( $\tau = .34$ ;  $P < 0.05$ ;  $N = 18$ ). One might suppose that these two questions are similar. Both are rating scales on a 5-point scale, one within the repertory grid, and the other in the

questionnaire. In view of this, although the correlation was significant, the strength of correlation at only .34 was not really very high.

It is not unreasonable when looking at this failure to reveal significant relationships to ask what mothers meant when they described their ESN (M) children as Friendly or Understanding if they were not talking about how children got on with other people and whether they had friends or acquaintances etc. An answer is perhaps suggested when one looks at columns 4 and 6 of Table 8.03. It will be seen that Adult Verbal Care and Child Verbal Care correlated strongly with mothers' assessments of how children got on with adults, both those whom children knew and those who were strangers. As more Verbal Care was expressed between mothers and their ESN (M) children, so children were rated as getting on better with known and unknown adults. I have already mentioned that being construed as Friendly correlated with the amount of Verbal Care from mother to child, and from child and mother, although Friendly did not correlate at all with getting on with known adults or adults who were strangers.

It would seem on the evidence collected that mothers who chatted a lot to their children and whose children chatted to them, assessed the children as getting on well with adults, and construed them as Friendly. Being construed as Friendly, in contrast, seemed to relate to the amount of chatter that passed between a mother and her child, rather than the mother's assessment of the child on any of the questions asked about Social Sensitivity.

Looking now at similar results relating to the teachers of the same ESN (M) children we see that the results do not give a completely similar picture.

TABLE 8.4

LIST OF CORRELATIONS BETWEEN FRIENDLY/UNFRIENDLY, UNDERSTANDING/  
INSENSITIVE, ADULT VERBAL CARE, ADULT VERBAL ACCEPTANCE  
AND SELECTED QUESTIONS FOR TEACHERS OF ESN (M) CHILDREN

(1)	FRIENDLY (2)	UNDER- STANDING (3)	ADULT VERBAL CARE (4)	ADULT VERBAL ACCEPT. (5)	CHILD VERBAL CARE (6)
FRIENDLY	-	.93**(19)	-.21(19)	-.25 (19)	-.45* (16)
UNDERSTANDING		-	-.17(19)	-.27 (16)	-.24 (16)
Adult Verbal CARE			-	.48*(19)	.53**(19)
Adult ACCEPTANCE				-	.78**(19)
Close friend	.12 (19)	.03 (19)	.24(19)	.23 (15)	.25 (16)
Acquaintances	.23 (19)	.35*(19)	.13(19)	0 (16)	N/A (16)
Keep/making friends	.35* (19)	.40*(19)	.11(19)	-.18 (16)	-.10 (16)
Getting on with:-					
<u>Known adults</u>	.22 (19)	.19 (19)	.22(19)	.16 (16)	-.03 (16)
Unknown adults	.01 (18)	.02 (19)	.12(18)	-.06 (15)	-.08 (15)
Known children	.25 (19)	.13 (19)	.20(19)	-.06 (16)	-.05 (16)
Unknown children	.40* (15)	.38*(19)	.26(19)	-.12 (16)	-.10 (16)
Cooperation	.27 (19)	-.06 (19)	.19(19)	.26 (15)	-.10 (16)
<u>Interrupting</u>	.25 (19)	.21 (19)	.10(19)	.09 (16)	.02 (16)
<u>Sensitive of others</u>	.29* (19)	.07 (19)	-.10(19)	-.01 (16)	-.18 (16)
<u>Judging others</u>	.32* (19)	.19 (16)	.03(19)	.09 (16)	-.36 (16)
Sensitive to others	.28* (18)	.37*(18)	0 (18)	-.28 (15)	-.51**(15)
Takes turns/shares	.26 (19)	.07 (19)	-.18(19)	.08 (16)	-.20 (16)
Praise/approval	0 (19)	.10 (19)	.19(19)	.15 (16)	.12 (12)
Key: *= $P < 0.05$ : **= $P < 0.01$ : N/A=Statistics not available Questions underlined: Mother and Teacher assessment correlated					

As with mothers, there was a very high correlation between the teachers' use of the construct Friendly and their use of the construct Understanding ( $r = .93$ ;  $P < 0.01$ ;  $N=19$ ). There was also a correlation between Friendly and the amount of chatter etc. that ESN (M) children directed towards their teachers, i.e. children who were construed as more friendly by their teachers, tended to be those children who talked most to their teachers ( $\tau = -.45$ ;  $P < 0.05$ ;  $N=16$ ). However, there was no correlation between construing a child as friendly and the frequency of teachers' Verbal Care or Acceptance that was directed towards that child.

Understanding did not correlate with adult Verbal Care and Acceptance, or with Child Verbal Care.

On the other hand, children who talked to their teachers more frequently received more verbal agreement from their teachers ( $r = .53$ :  $P < 0.01$ :  $N = 19$ ). They were also likely to receive more praise and encouragement and general chatter from their teachers ( $r = .78$ :  $P < 0.01$ :  $N = 19$ ).

Looking at the lower half of the table (column 2), it will be seen that children construed as Friendly were also likely to be assessed by their teachers as good at keeping and making friends ( $\tau = .35$ :  $P < 0.05$ :  $N = 19$ ); getting on with unknown children well ( $\tau = .40$ :  $P < 0.05$ :  $N = 19$ ); as being sensitive of ( $\tau = .29$ :  $P < 0.05$ :  $N = 19$ ) and accurate about ( $\tau = .32$ :  $P < 0.05$ :  $N = 19$ ) what others thought of them. Children construed as Friendly by teachers were also judged to be sensitive towards other people ( $\tau = .28$ :  $P < 0.05$ :  $N = 18$ ).

Being seen as Understanding correlated with being seen as sensitive towards ( $\tau = .37$ :  $P < 0.05$ :  $N = 18$ ) other people (as was the case with mothers). In addition, teachers who construed children as being Understanding (column 3), also tended to see them as having many acquaintances (i.e. they were popular) ( $\tau = .35$ :  $P < 0.05$ :  $N = 19$ ); being good at making and keeping friends ( $\tau = .40$ :  $P < 0.05$ :  $N = 19$ ); and getting on with unknown children ( $\tau = .38$ :  $P < 0.05$ :  $N = 19$ ).

However, none of the teachers' assessments on aspects of social sensitivity correlated significantly with either teachers' Verbal Care (Column 4) or Acceptance (Column 5) of the child. Children who were observed to chat a lot to their teachers were judged to be sensitive towards others ( $\tau = -.51$ :  $P < 0.01$ :  $N = 15$ ), but no other assessments correlated with Child Verbal Care.

Stated in different terms, children who were assessed by their teachers to be sensitive to others were also likely to be construed as Friendly and Understanding, and to talk to their teachers. Children who talked to their teachers were construed as being Friendly, assessed as being sensitive to others and received considerable agreement and praise, general chatter etc. from their teachers.

A number of points arise when one considers Tables 8.03 and 8.04 together. Perhaps the most interesting results are those relating to what can be inferred with reference to the observed behaviour categories and the questions selected as aspects of Social Awareness when mothers and teachers describe ESN (M) children as Friendly. Within this sample the only apparent common inference that teachers and mothers hold when describing a child as friendly was that the child chatted to them. For mothers, describing children as friendly implied that they, the mothers, also praised and chatted to their children. In the case of the teachers, this was not the case. For them being Friendly implied that children were likely to get on with unknown children and were sensitive of and towards others.

This is important. For a start, mothers were imparting some knowledge about themselves when they described ESN (M) children as friendly - i.e they talked to their children - rather than just saying something about their children. Teachers, on the other hand did not praise or chat to friendly children more than to others. Thus, when teachers tell mothers that children are friendly, the teacher will often be implying that the child has some aptitude in the various social skills described above. Because mothers do not assess friendly children as being particularly proficient in these skills, they may in turn be unaware of the full significance of what teachers may be implying.

Similar questions could be also considered with regard to the implications of construing ESN (M) children as Understanding. Although both mothers and teachers implied that children were sensitive to others' feelings when those feelings were not directed towards the child, teachers also tended to be implying that the children might be more popular, better at keeping and making friends and get on well with unknown children. This is not the case with mothers.

#### 8.4 Summary

The sections on Independence and Control, and Friendly, Care and Acceptance etc. have shown that different methods of assessment which may be thought to overlap considerably need not produce the same or even compatible information about ESN (M) children.

In the section on Independence and Control etc. observations of mothers' Verbal Control and Resistance gave little indication about how they construed their own ESN (M) children in terms of Independence or Ability to make up one's own mind, nor which autonomy and self care tasks the children were thought capable of doing. However, there were a number of correlations between mothers' construing children as Independent or Able to make up their own mind, and their assessment of the children's ability to carry out various self care and autonomy tasks.

For the teachers, the same overall pattern was also found. With regard to teachers' telling off or resisting ESN (M) children, it was seen that those children who were assessed as needing more praise/approval/encouragement, were resisted more frequently, although they did not receive more praise from their teachers than did other children. Children who were told what to do by their teachers more frequently were seen to cook a meal for themselves less often, but otherwise there were no other correlations between Control and the various questions. Where there were correlations between teachers' construing children as Independent or Able to make up their own mind and various questions these were rarely for the same questions that had been found in the mothers' assessments.

With regard to the construct Friendly, and observations of Care and Acceptance, it was found that while there were correlations between teachers' construing children as Understanding or Friendly and various questions on social sensitivity, for the mothers there were no correlations at all between Friendly and the questions, and only one correlation between Understanding and any of the questions. Teachers' Verbal Care did not correlate at all with any of the assessments, nor with whether they construed children as Friendly or Understanding. This was not the case for the mothers. Here mothers' Verbal Care correlated highly with construing children as Friendly, although with none of the questions.

#### The multi-dimensional approach

These results indicate the importance of a multi-dimensional approach when looking at the mutual understanding between mothers and teachers as they discuss ESN (M) children. Results from the

previous sections have indicated that in various ways, mothers and teachers do not agree either in how they construe ESN (M) children, nor in how they assess many of the children's specific abilities in social and independence skills.

This can partly be seen to be because children's behaviour at home and at school rarely correlates. Results in this section indicate that in addition to the separate information from observations, assessments and grids, looking at the relationship between certain aspects of all three, new information can be gained about what mothers and teachers are inferring when they make assessments or construe a child in a certain way. This justifies not only a multi-axial approach to fundamental questions about how mothers and teachers perceive ESN (M) children, but clearly recommends that such an approach is crucial, both at a research and at a clinical/educational level.



9.

DISCUSSION9.1 Introduction

The major questions behind the present study relate to the exploration of whether mothers and teachers perceive ESN (M) children in the same or a different way; and whether this is related to situational factors (i.e. the home or school environment), something to do with the children themselves (i.e. whether it is because they are ESN (M) rather than Normal) or an interaction of the two. Thus the sorts of questions that have been asked are: Do mothers and teachers have different perceptions of ESN (M) (and Normal) children as a group ? Do they agree over which ESN (M) (and Normal) children they rate highly ? Do children behave differently at home and at school ? Do ESN (M) and Normal children behave differently in these environments and, if so, is this because they are responding to different environments (i.e. the home or school environment is different for ESN (M) and Normal children) or because their behaviour is different due to some intrinsic difference in the children which suggests that the ESN (M) are less competent in social and independence skills.

It would, of course, be simplistic to suggest that differences, when they occur, are merely a matter of different maternal or teacher perceptions, or due to learning difficulties or environmental factors. The answer lies somewhere in the complex interaction of all these aspects as well as wider social factors which have been discussed briefly in the Introduction.

The discussion will comprise 4 sections:-

1. Discussion of the Results in relation to previous research.
2. Critical Evaluation of the Present Study and Suggested Areas of Further Research.
3. Summary and conclusions.
4. Implications and Recommendations.

9.2 Discussion of Results in relation to previous Research

The literature review had indicated that there was equivocal evidence on whether mothers and teachers perceived children and adolescents with learning difficulties either more or less

positively, although generally they seemed to differ in their perceptions (Blazovic, 1972; Savage, 1977; Prout et al, 1978; Rosenberg, 1979; Middleton, 1980; and Heath and Obzrut, 1984). To some extent this related to whether children were severely handicapped or mild to moderately handicapped.

#### 9.2.1 Major Hypotheses

The main group of hypotheses had been that, in general terms, mothers and teachers would perceive children differently with regard to social maturity and that, with regard to specific social and independence skills, mothers would be more negative in their ratings than teachers, although their ratings would positively correlate. In addition children as a group would behave differently at home and at school where they would experience different behavioural environments. These hypotheses were only partially confirmed.

The second group of hypotheses predicted that ESN (M) children would be perceived negatively by mothers and teachers compared to Normal children both generally and in terms of specific skills. It was also hypothesised that children would behave differently at home and at school, and experience different behavioural environments. Again the results have shown that these hypotheses were only partially confirmed.

Because both the research findings and the conclusions which may be tentatively reached are complex, the discussion which follows will begin with an outline of the argument to be pursued.

Firstly the manner in which mothers and teachers construe social maturity will be considered and then how they perceive ESN (M) children as socially mature. Questions arising from this, namely, whether children behave differently in the two environments, whether mothers and teachers assess the same behaviour differently, and whether this relates specifically to ESN (M) children or is also true of Normal children, will be addressed separately drawing from the evidence of both the repertory grid, observation and questionnaire data.

The implications of this discussion will be considered in the light of previous research concentrating on independence skills,

and friendliness and understanding, which were examined in the Links section of the results. Finally alternative explanations will be looked at from the evidence of the subsidiary hypotheses.

### 9.2.2 The Construction of Social Maturity

Both mothers and teachers of ESN (M) children used the constructs in the grid in very much the same way to discriminate between those adults and children they thought were mature and whom they liked, and those who were seen as immature and disliked (Table 7.15). Assuming that the constructs in the grid represented some measure of maturity to these mothers, the positive poles (e.g. helpful, friendly, independent etc.) of all constructs appeared to relate to the kind of people they saw as being mature, and whom they liked. For teachers, qualities they particularly liked and linked with maturity appeared to be independence, practicality and decisiveness. Friendliness, being helpful and understanding were more peripheral. This slightly different emphasis in judging social maturity is important when we consider how mothers and teachers perceived ESN (M) children.

### 9.2.3 Mothers' and Teachers' Perception of ESN (M) Children

Although ESN (M) children were judged as mature by their mothers, it was essentially in terms of being friendly, helpful and understanding rather than practical, decisive, positive and independent (Table 7.02). In contrast, teachers rated ESN (M) children negatively on all the constructs, i.e. they perceived them as immature (within the terms of reference of the grid). Teachers perceived these children as decidedly dependent, impractical, indecisive and anxious and not particularly friendly (Table 7.06). Thus there was wide variation in the way the same ESN (M) children were perceived by mothers and teachers, with mothers having a more positive picture than did teachers, a result which agrees with those of Mealor and Richmond (1980) and Prout et al (1978). This appears to be related to the different perspectives of social maturity held by mothers and teachers.

This can be considered in conjunction with the findings of Bartnik and Winkler (1981) which suggested that parents were more concerned about social activities, while service staff concentrated

on teaching personal responsibility to young handicapped adults. Perhaps what is occurring is a different emphasis on what is considered socially mature, partly as a rationalisation by parents about their concern for their children, and partly as a function of parents' and teachers' different roles. The finding also suggests the difficulties that teachers may face when wishing to teach independence skills to pupils, about which parents are concerned (Ferrara, 1979; Mittler and Mittler, 1982). It also links in with Malekpour's finding (1981) that teachers tended to express more lenient attitudes towards EMR than Normal children because they see them as less responsible for their actions.

Compared with other children/adults in the grid, mothers tended to see their own children as most similar to children who were two to three years younger than their own (Table 7.4). Teachers perceived ESN (M) children as least similar to the kind of adults they most liked (Table 7.08). To some extent the mothers' perception might again reflect an awareness and interpretation of their children's difficulties as a developmental delay. With regard to teachers' perceptions, being seen as most similar to the dare devil/adventurous child did not endear ESN (M) children to their teachers, and indicates the somewhat negative light in which they were viewed.

If, then, mothers and teachers used the constructs in a generally similar manner, but perceived ESN (M) children quite differently, a number of questions can be posed: (a) was there a relationship between the way children behaved at home and at school, thus presenting their mothers and teachers with different facets of themselves? (b) Did these mothers and teachers as two separate groups interpret the children's behaviour differently, although it was essentially the same? And/or (c) are these findings in any way different for the Normal group of children observed.

#### 9.2.4 Is there a relationship between children's behaviour at home and at school?

This question can be answered by looking at the correlations between children's general behaviour in these two environments and their mothers' and teachers' assessments of their specific skills.

For ESN (M) children, verbal behaviour at home did not correlate at all with verbal behaviour displayed at school (Appendix 5.1), and for non-verbal behaviour, only smiling, laughing and generally sociable behaviour (Non-Verbal Care) was significantly correlated (Appendix 5.3). This might therefore explain why mothers and teachers construed ESN (M) children differently - there was little correlation between observed behaviour at home and at school. In a much younger population (four year olds) Tizard and Hughes (1984) found a similar lack of association between normal children's school and home behaviour.

There are a number of reasons why this might be so. Firstly, there was virtually no association between the verbal and non-verbal environments experienced by children in either home or school, e.g. children who were praised a lot at school could not expect to be praised a lot at home (Appendices 5.2 and 5.4).

Secondly, the categories of behaviour used in this study may have been insufficiently sensitive to pick up the nuances of behaviour displayed by children (and adults) which would show a similarity in their behaviour between the two environments. Prout et al.'s (1978) results showed high correlations between mothers' and teachers' rating of specific skills although, as a group, mothers had rated severely handicapped children as more competent than teachers did, as Meador and Richmond (1980) had also found. It might therefore have been expected that specific skills would show closer mother and teacher agreement in the present study, as hypothesized. Yet looking at the questionnaire data, mothers and teachers rarely agreed in how they rated the same ESN (M) children, and correlations, when they occurred, were not above .50.

In summary, the answer to the question of why ESN (M) children were construed differently by mothers and teachers is partly that they behaved differently in the school and home settings. Observations show that there was little correlation between their behaviour at home and at school, and questionnaire data indicated mothers and teachers rarely rated children similarly on specific skills at a significant level.

### 9.2.5 Do ESN (M) children as a group behave differently at home and at school?

Observation data indicated some significant differences in children's general behaviour in the two environments. However, although a number of studies suggested parents and teachers rated children differently on specific questions (Prout et al, 1978; Rosenberg, 1979; Mealor and Richmond, 1980; Middleton, 1980; and Obzrut and Heath, 1984), as a group ESN (M) children were not rated as more competent in specific social and independence skills by their teachers than by their mothers when the questionnaire data was examined.

Observations indicated that children controlled their mothers more frequently than their teachers (although this behaviour occurred rarely) (Table 5.14), and also disagreed with them more often (Table 5.18). Gottlieb (1978) has pointed out the importance of the general obtrusiveness of behaviour in influencing other people's perceptions. In other words, even if verbal control or resistance occurs very rarely, it is likely to be more influential than a child ignoring adults or not responding. At the same time, Tizard and Hughes (1984) suggest that 'disputes' may still provide a positive learning environment and thus may be seen as having positive connotations. In view of the above findings, the comparative positive view which mothers showed compared to teachers of ESN (M) children in this study does not reflect Gottlieb's conclusion, although later it may be seen to be influential in differentiating between mothers' perceptions of ESN (M) and Normal children.

At the same time, children chatted, smiled and laughed more at home with their mothers than at school with their teachers (Tables 5.15 and 5.19). However, they generally listened to or obeyed their teachers more than their mothers (Table 5.15), and also asked them more questions (Table 5.17).

Thus not only did individual children behave differently at home and at school, but as a group there were differences in how they behaved in these two different environments. This might well explain the difference in the way they were construed by their mothers and teachers. However, the data do not give any real

indication as to why mothers construed the children as more mature compared with teachers, unless the fact that they talked and chattered more to their mothers than to their teachers is taken by mothers as being some measure of social maturity. Mothers, it will be remembered, used 'friendly' as one of the constructs which particularly related to ESN (M) children and was an important component of being seen as mature.

#### 9.2.6 Are the findings similar for Normal children?

Looking back at the comparative analysis of grids completed by mothers and teachers of Normal children, one can see that, while mothers and teachers used the constructs in the same way (as had occurred with the ESN (M) group) (Table 7.17), they construed the same Normal children in very similar terms, generally rating them midway between either pole of each construct, for example, as neither particularly friendly nor unfriendly. This differed from the findings for ESN (M) children.

As mothers and teachers used the constructs similarly, and also construed Normal children in the same way, it might be assumed that the behaviour of Normal children was similar at home and at school, and that there would be high correlations between how they behaved in the two environments.

Yet looking at observed behaviour at home and at school for Normal children, the findings showed there were few correlations between children's behaviour at home and at school (Appendices 5.1 and 5.3), and equally few correlations between the types of behaviour experienced in the two environments, findings very similar to those for ESN (M) children (Appendices 5.2 and 5.4). In addition, mothers and teachers rated Normal children similarly on specific skills even less frequently than they did ESN (M) children. However, they generally did not differ in how they rated Normal children as a group in terms of specific skills.

At the same time, observation of behaviour had indicated various differences between children's behaviour at home and at school, although these were generally of a similar nature to the differences displayed by ESN (M) children in the two environments. Why then were Normal children construed similarly although they

behaved differently with mothers and teachers, when ESN (M) children were construed differently when they behaved differently? One possibility is that mothers of ESN (M) and Normal children used constructs differently (as did teachers). Secondly, the ESN (M) and Normal children might be perceived differently, and, finally, ESN (M) and Normal children might behave differently both at home and at school.

#### 9.2.7 A different perspective of social maturity?

Mothers of Normal children tended to use the constructs in a fairly similar manner to mothers of ESN (M) children (Table 7.19), i.e. as a means of discriminating between liked, mature children and adults, and disliked, immature children and adults. Turning to the teachers' grids, analysis showed that teachers of Normal children used the constructs more widely when compared to the other three groups, but basically used the same major dimensions. Thus, overall, mothers and teachers of both groups of children used the constructs in the grid in a similar manner in understanding social maturity.

#### 9.2.8 Are ESN (M) and Normal children construed differently in terms of their social maturity?

Blazovic (1972) had found that parents did not perceive their mildly handicapped children differently from Normal children in terms of sociability. This was not the case in the present study, where there was considerable variation in the way mothers perceived their own children in terms of whether they were ESN (M) or Normal (Table 7.20).

Although Normal children were also construed positively on all constructs, being seen as particularly friendly, helpful and understanding, as were ESN (M) children, mothers construed their own Normal children more positively than their own ESN (M) children on all constructs, except being calm and helpful. This, therefore, suggests that although mothers of ESN (M) children may appear to perceive their children as mature when compared to teachers' perceptions, when compared to the way mothers of Normal children perceive their children ESN (M) children are seen as immature by their mothers. Intuitively, this may not seem surprising.



Because all the information on the grid is taken into account when ratings for each child/adult (element) are analysed across all constructs, the way other children and adults were construed will have affected the analysis of mothers' ratings of their own children. This may account for the fact that, compared to teachers, they rated their own children as mature, but when compared to mothers of Normal children, they rated their own children as immature. Although, wherever possible, mothers were asked to supply the names of children who went to Normal schools for the other element roles, a number of mothers of ESN (M) children had little contact with the range of children in normal schools, and thus they were sometimes comparing their child with a number of other ESN (M) children, but there was always a "normal" child for the "Normal Child" role. On the other hand, mothers of Normal children tended to compare their child against other normal children.

Teachers perceived Normal children positively on all constructs, although as not particularly able to make up their own minds (Table 7.13). ESN (M) children as a group were seen as less mature on all constructs (particularly less independent, positive, practical and decisive) by their teachers, compared to the way Normal children were construed by their teachers.

#### 9.2.9 Do ESN (M) and Normal children behave differently?

So if the constructs were generally used in a similar manner by mothers and teachers of ESN (M) and Normal children, but ESN (M) children were construed less positively by both mothers and teachers compared to the Normal group, was there a difference in their behaviour that would suggest they were less socially mature?

With their mothers there was virtually no difference in the way ESN (M) and Normal children behaved (Tables 5.13, 5.33 and 5.34), except that they resisted their mothers more and agreed with them less than Normal children. Thus, at home, the difference in how ESN (M) and Normal children were construed could in part be related to this. Mason (1979) had suggested that negative information had a greater effect than neutral or positive information on teachers' perceptions; and as Gottlieb (1978) suggested, negative behaviour has a greater impact on a person's perceptions than positive behaviour.

At school, ESN (M) children tended to go off task more than Normal children, worked less, agreed with their teachers less, and did not smile and laugh as much with them. These differences might account for the more negative way teachers construed ESN (M) children compared to Normal children.

The questionnaire results give further evidence. Mothers rated ESN (M) children as less capable than Normal children in handling money, shopping and cooking (Table 6.2), and travelling alone (Table 6.4). These results concur with the findings of Jeffree and Cheseldine (1981), who found that severely handicapped teenagers rarely took part in these activities alone or unaided. Smith and Sykes (1981), however, had found that 70% of the mildly handicapped adolescents in their Australian sample travelled alone, and around a third shopped alone.

Keeping friends and understanding sex (Table 6.6), coping with criticism (Table 6.8) and their interest in the news and their realism about their future plans (Table 6.10) were also areas where mothers saw ESN (M) children as less competent than Normal children. Lack of opportunity to carry out certain skills also tended to be explained in terms of ESN (M) children's learning difficulties or lack of social facilities (Table 6.12), although for individual questions mothers occasionally indicated that they tended to worry and be 'over-protective', although they knew their children could do these things. Landman (1978) suggested that over-protectiveness could take the form of over-indulgence and subservience to the child, or lead a parent to control and dominate so that the child was submissive and obedient. As discussed earlier, there is always a difficulty in knowing what is desirable protectiveness and what is not. Mothers admitting they were over-protective might indicate why they tended to control rather than indulge their children.

To some extent the results relate to the work of Jeffree and Chesledine (1981), who found that ESN (S) children's competence in various skills depended on whether the skills related to actions being carried out in or outside the home, and the Smith and Sykes (1981) finding that Normal and mildly handicapped adolescents displayed similar skills in the house, but that Normal adolescents tended to have more opportunities outside the home.

Turning to the teachers' results, they also rated ESN (M) children as less competent on a number of specific skills in the questionnaire compared to Normal children, which is in line with the evidence from observations, and may in part explain their negative perceptions.

#### 9.2.10 Do ESN (M) and Normal children experience different behavioural environments?

If, then, ESN (M) and Normal children behave differently and are construed differently at home (and at school), it is possible that they are also the recipients of differing interactions from their mothers (and their teachers).

Observations of mothers' behaviour indicated that generally they did not differ in how they interacted with their ESN (M) or Normal children, although they gave proportionately more verbal control and resistance to the ESN (M) group. At school, teachers were also found to interact differently with the two groups of children (Table 5.34). They not only chatted, praised and smiled at Normal children more than ESN (M) children, but also asked them more questions. Although we cannot make any causal inferences, these findings have important implications. It would seem to be a matter of concern that ESN (M) children appear to be in less stimulating and caring classroom environments than Normal children, and this may relate to their own more negative behaviour.

#### 9.2.11 Independence and Decisiveness

These anomalies were considered further in the Links Section, in order to clarify what processes might be going on. Mothers and teachers had differed most when they construed children on the constructs 'able to make up own mind', 'independent' and 'calm'. Landman had found (1978) that EMR children who were over-protected by their parents (i.e. whose independence was controlled by their parents) tended to have impaired life skills (in terms of purchasing, and particularly job-search and banking). Were there similar links in the ESN (M) group studied?

Mothers appeared to use knowledge of the ESN (M) children's ability to spend pocket money, travel alone and their need for praise and approval as indicators of independence (Table 8.1), and

children construed as dependent tended not to shop alone, travel for long distances, cook or make themselves a hot drink, nor have their own front door key. Thus it seems that these skills where mothers saw ESN (M) children as less competent than Normal children, related to some degree to mothers' judgments of their ESN (M) children as dependent and indecisive. Landman (1978) had found that over-protectiveness might not be detrimental in the long term to children who initially lacked the opportunity to carry out life-skills, and suggested parents might be seeing their children's development as delayed. In this study, mothers construed ESN (M) children as most like younger children, possibly also implying a developmental delay.

The above skills might also be considered as occasions when problem-solving skills are needed in order to cope adequately. If this can be assumed, then it is possible to consider whether Hunt's (1980, 1982) suggestion that mothers do less problem solving in their interactions with independent rather than dependent mildly handicapped children has been repeated. Herman and Shantz (1983) had also found a relationship between maternal directiveness and lack of problem-solving skills in EMR children.

It will be remembered that ESN (M) children displayed more control and resistance towards their mothers, perhaps because they, as a group, experienced different behavioural environments as both Mitchell (1976) and Hannam (1875) suggested. Results indicated that ESN (M) children were verbally and non-verbally controlled, and verbally resisted more often by their mothers than were Normal children (Table 5.04 and Table 5.34).

The importance of ESN (M) children being more controlled may have both positive and negative implications. Berson (1975) discussed the possibility that EMR children might externalise their locus of control, and expect more control from parents at a later age than Normal children of the same chronological age, in order to retain their feelings of self-confidence and security and enhance their self-image.

In contrast, Landman (1978) had found that early exposure to opportunities to exercise skills tended to benefit EMR children's abilities and not cause anxiety and failure. Nihira et al (1981)

have also found a link between independence from parental control and social skills and self-sufficiency in TMR children at school.

Was there any relationship then between mothers' behaviour and how they construed their ESN (M) children ? Organist (1971) had found no correlation between parental encouragement patterns and children's current behaviour; nor between the ways parents encouraged their children and children's behaviour, and parental expectancies. We have already seen that there were some correlations between mothers' and children's behaviour at home.

Yet construing ESN (M) children as decisive/indecisive or independent/dependent was not related to mothers' verbal control or resistance (Table 8.01), nor were ESN (M) children's capabilities in those areas which were thought to measure independence, practical and coping skills, related at all to mothers' verbal control or resistance. How a mother rated her ESN (M) child in both general (construct) or specific (questionnaire) terms did not relate to her control or disagreement/resistance of her child. In this case then, mothers' controlling behaviour did not appear to relate to dependency in their ESN (M) children. Similarly teachers only rarely moderated their verbal control or disagreement/resistance towards ESN (M) children in relation to how they rated children on specific questions or to how they construed ESN (M) children in terms of being independent or decisive.

These findings are contrary to what Hunt (1980, 1982), Landman (1978), Nihira et al (1961) and Herman and Shantz (1983) had concluded. Unfortunately, what is lacking in the present research is a test of Berson's (1975) hypothesis about the external locus of control which would have required a link between the children's perceptions of themselves and their teachers' and mothers', and the various measures in the present study. This would be an interesting and valuable addition to the study.

#### 9.2.12 Friendliness and Understanding

The pattern of relationships between specific and general skills and mothers' and children's behaviour with regard to independence and decisiveness etc. was not reflected when the constructs friendly and understanding were considered.

When mothers used the construct friendly to describe their ESN (M) children it was not related to any of the specific questions about their children's ability and opportunity to maintain relationships nor to their children's social sensitivity (Table 8.3). Understanding correlated significantly only with a specific question on children's sensitivity to others, and in view of the dearth of significant results, could have occurred by chance.

However, describing children as friendly was significantly related to the level of chatter and praise (verbal care) of both mothers and ESN (M) children, although there was no correlation between mothers' and ESN (M) children's verbal care (Appendix 5.5), i.e. those mothers chatting more to their children were not those to whom children chatted a lot. Of course, children's verbal care comprised nearly half their interactions with their mothers (48% (ESN (M) and 50% Normal), and it is this perhaps which partly influenced mothers to construe their children as friendly. Yet despite the fact that verbal care both from mothers and ESN (M) children correlated with mothers' judging their children as getting on well with adults, getting on well with adults was not related to mothers rating children as friendly. In the final analysis, it seemed that construing a child as friendly related only to mothers' and ESN (M) children's verbal care, but to none of the specific behaviours thought to be subsumed by the general construct of being friendly.

Looking at the school data, in the classroom ESN (M) children were asked fewer questions, replied to their teachers less often and resisted or disagreed with their teachers more often than Normal children. They also laughed and smiled less, and were on task less often than Normal children. These differences in their behaviour would seem to link in with the more negative way they were construed by their teachers. This would appear to link in with Tizard and Hughes' (1984) research that the quality of teachers' talk to children related to nursery children's communication skills, and tends to support Bolstad and Johnson's finding (1977) that non-attendance was used as a criteria for teachers in their classroom ratings of children. The finding may also relate to the fact that they experienced less positive and caring interactions from their teachers (Tables 5.04 and 5.33) than did normal children.

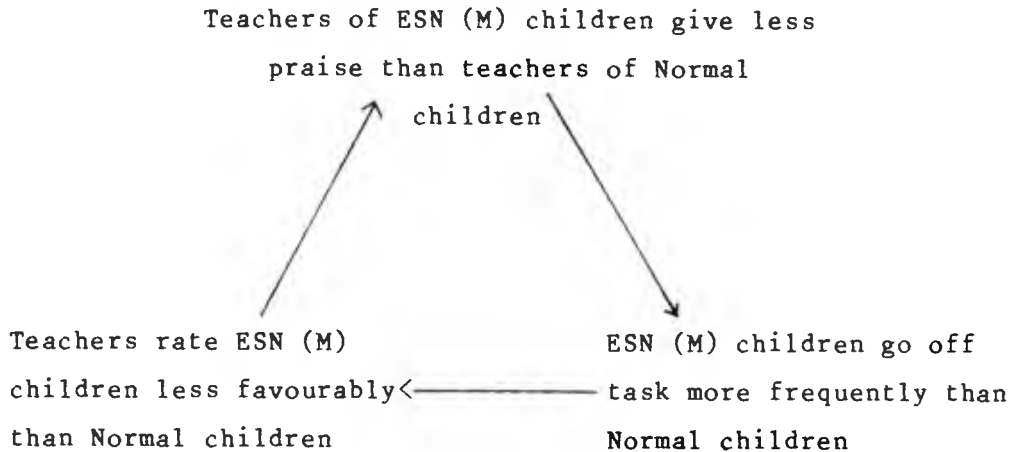
The first result was also found by Raber and Weisz (1981). Teachers tended to be more directive (i.e. used more verbal control) with ESN (M) than with Normal children. This can be seen in the light of Semmel et al's finding that TMR children who gained more on communication scales came from less restrictive classrooms. In this study, ESN (M) children were generally less verbal than Normal children.

ESN (M) children also received less non-verbal care as well as less praise, chatter etc. This is contrary to the findings reported by Semmel et al (1973) who found that TMR children received more praise and encouragement from their teachers than the Normal group of children. The difference in the findings here may be that, in the present study the 'verbal care' category included teaching by explaining and general chatter as well as praise. Another reason for the differing results is that Semmel's sample were more handicapped.

The result is significant in view of Forness et al's (1982) finding that friendliness related to EMR children remaining on task. In this study adult verbal care (praise, chatter and teaching by explaining) significantly correlated with reduced non-verbal resistance (going off task) in ESN (M) children, but not with the same group of children's non-verbal acceptance (on task behaviour). Even so, the fact that ESN (M) children received less praise than Normal children, taken with the possible implication that teachers may judge non-attendance as a criteria in their ratings of children (Bolstad and Johnson, 1977), may be important. Teachers' perceptions may become part of a circle of behaviour that traps both the child and the teacher into a negative and unproductive pattern. Figure 9.01 below illustrates.

Figure 9.01

LINK BETWEEN TEACHERS' BEHAVIOUR AND PERCEPTIONS AND CHILDREN'S  
BEHAVIOUR



This model links nicely with Figure 2.1 at the beginning of the literature review which proposed certain links between teachers' behaviour, knowledge base, and perceptions of the children's behaviour and with the findings of Organist (1971) and Cunningham and Davis (1985). No causal assumptions can of course be made, but the implications are that a change in teachers' behaviour and attitudes may change the children's behaviour etc.

This relates back to Nash's (1973) finding that a teacher's favourable perception of a child was reflected in positive behaviour towards that child, while a negatively perceived child had to wait for materials etc, and was told off for not getting on when this was partly a consequence of the teacher's poor management. Fry (1983) and Forness et al (1982) had found similar links between the importance of negative and positive psychological dimensions in a classroom and EMR children's behaviour, particularly attendance to their work.

Looked at another way, the child's behaviour may confirm a teacher's perception and may become generalised as a way that ESN (M) children behave generally. Tizard and Hughes (1984) suggest the same process is at work in nursery teachers' behaviour to young working class children. The importance of this is that children need teachers and parents to reflect back the consequences of their behaviour (McConachie, 1985). At the same time teachers and parents need to be aware that children reflect back



to them the consequences of their, the teachers' and parents', behaviour. It may be that Ensher's (1973) clinically derived conclusion that handicapped children carry the 'burdens of inexorable attitudes' of their teachers is not entirely without foundation.

### 9.3. Alternative Explanations

It is now important to consider whether other factors could account for the results.

#### 9.3.1 Age

Because the two groups of children were not matched it is possible that a number of other factors related to the results, e.g. the children's age, sex and socio-economic class. The ESN (M) children were older than the Normal group (Table 3.2) (6 months), and it had been felt that this discrepancy might reduce any significant difference between the two groups of children. In fact, ESN (M) children were construed to be most like younger children by their mothers (Table 7.04).

Yet, analysis of the children's age as a factor relating to mothers' behaviour showed few significant results (Table 5.34) and the children's age did not affect teachers' interactions at all. In addition, children were not seen to behave in a particularly disparate manner according to their age group (Appendices 6.38 and 6.39).

Questions analysed for the effects of age showed that mothers did not differentiate the ESN (M) children's competency by age, but older Normal children were seen as showing more interest in sex. This latter result is of interest as ESN (M) children were generally seen as having less understanding of sex than Normal children. Thus, as the Normal group were significantly younger, it would appear that mothers perceive their ESN (M) children as less sexually mature than Normal children. A similar conclusion can also be drawn from the analysis of teachers' answers to the questionnaire.

Apart from this finding, age was generally not seen to be a significant factor in the results of the questionnaire or observations, and thus it would be an unlikely factor for explaining the major results.

### 9.3.2 Sex

A second subsidiary factor considered was the effect of children's sex. Boys and girls were almost equally represented in both groups (ESN 9:10 and Normal 8:10 respectively). The conclusion drawn from the analysis of the repertory grids was that children's sex was not a major variable in determining how mothers and teachers construed ESN (M) and Normal children; and observations indicated that children's sex was not related to how mothers interacted with their children at all (Table 5.34). Essentially this was also true of children's behaviour at home except that mothers were ignored more by ESN (M) than Normal girls; but more by Normal than ESN (M) boys (Table 5.32). At school, children's sex related to the amount they talked to their teacher; and boys were more frequently talked to by their teachers than were girls.

Analysis of a selected number of questions showed very few significant differences related to children's sex (Appendices 6.36 and 6.37). Overall then children's sex did not appear to be a factor in explaining the major findings.

### 9.3.3 Socio-Economic Class

The third variable considered in all major results sections was socio-economic class (SEC). There was no significant difference between the number of ESN (M) and Normal children in middle or working class homes (Table 3.9), although there was a tendency for more ESN (M) than Normal children to come from working class families.

Generally, SEC was not a major factor in differentiating how mothers or teachers construed the children, although teachers perceived working class Normal children as more mature than did mothers. However, with an N of four for Normal working class children, the result is very ambiguous.

Teachers' behaviour did not differ between working and middle class children, different from Tizard and Hughes' (1984) finding, but in, of course, a much younger group of children. Essentially children did not behave differently towards their teachers (Table 5.34). At home there was a different picture, with middle class mothers chatting (Table 5.27), agreeing and disagreeing (Table 5.28) with ESN (M) children more frequently than Normal

children, but working class mothers doing so more frequently to Normal rather than ESN (M) children. Children themselves did not behave differently. SEC also had little effect on the way mothers and teachers rated children on selected items in the questionnaire.

On balance, it does not appear that children's age, sex or SEC were major variables accounting for the significant differences in the results.

#### 9.3.4 Summary

The conclusion that may be drawn from all these results is complex and confusing. ESN (M) children were construed differently by their mothers and teachers. This would appear to relate to the fact that their behaviour rarely correlated between home and classroom environments. Yet Normal children were construed very similarly by their mothers and teachers despite a similar lack of correlation between their behaviour in the two environments.

While perceiving their ESN (M) children as relatively mature compared with teachers' ratings, mothers rated their children as being less competent on a number of tasks. The fact that they perceived their children as mature despite this, seems in part to be related to the different concrete implications they gave to the constructs used. It is also possible that when taken in a specific context, mothers will describe their ESN (M) children as generally mature when talking to teachers, but when asked to give concrete examples will not significantly differ from teachers' ratings.

In addition, the lack of correlation between children's behaviour at home and at school is reflected in the lack of correlation between mothers' and teachers' ratings on specific items in the questionnaire, a finding which holds for both groups of children. Although there was agreement on some items, notably on understanding money, inability to travel alone, cook without help and understanding sex - areas where both mothers and teachers tended to see ESN (M) children as less competent than Normal children - the general lack of agreement between their ratings emphasizes the importance of considering the different contexts in which children are assessed, particularly in these social and independence skills.

Thus three major points arise in trying to fit the results into some form of model: a) that what is implied by the words to describe ESN (M) children by mothers and teachers may differ; b) that it is important to define the specific, concrete descriptions of behaviour assessed; and c) that in order to make sense of the child's behaviour, the context needs to be considered as an important influence, so that where there are disagreements these are not usefully cast in terms of misperceptions by one or other party.

#### 9.4 Critical Evaluation of the Present Study and Suggested Areas of Further Research

##### 9.4.1 Sample

The present study involved intensive data collection for over a year, which entailed more than 220 visits to homes and schools, many visits lasting well over than 2 hours. Nonetheless, because of the relatively small sample size, it is difficult to generalise the results. It had originally been hoped to collect a full set of data on 30 ESN (M) and 30 Normal children. Unfortunately, there were considerable difficulties in getting a suitably large sample, partly because some parents and teachers were unwilling to allow observations to be made in their homes or classrooms and partly in getting schools to agree to involvement in the first place. In addition, all the schools but one (normal school) came from inner city areas.

Secondly, it was not possible to select schools. The Inner London Education Authority gave the names of the schools which had agreed to be involved and there was no opportunity to select. In addition, after careful consideration, it was left to headteachers to choose those teachers whom they thought would agree to take part in the study, and to choose those families whom they thought would allow me into their homes. As already discussed in the section Methodology: Sample this procedure was thought preferable to approaching teachers and families at random and causing difficulties in the school or between school and parents as the co-operation of the school was essential in carrying out the study. It is therefore likely that both teachers and families who were involved were those who would have been relatively co-operative

(although there were one or two occasions when either a teacher or family proved elusive in completing the questionnaire and grid). Thus the results are likely to be conservative as the most difficult children and families were probably not involved in the study. While this sample bias was regrettable it was unavoidable. It probably means that the results reflect a situation where parents have relatively close and good contact with the school, and where there is a free flow of information between home and school. Assuming this, it is pertinent to ask whether there would have been even less agreement with a more randomly selected sample. Even so it is likely that self-selection by parents would lead those who had least contact with the school not to participate.

Apart from unequal numbers in the two groups of children (19:18) the ESN (M) and Normal children were not matched across a number of variables. Again, this was because of the difficulty in obtaining sufficient children and families to take part in the study. On two variables in particular, age and SEC, it would have been useful if the two groups had been matched. It will be remembered that mothers saw their ESN (M) children as most like children who were around 3 years younger than their own child. although the ESN (M) sample were older (if not significantly) than the Normal group - by 6 months.

Although there was no significant stastical difference between the two groups of children with regard to S.E.C., 15 of the 19 ESN (M) children came from Social Classes 4 and 5 while only 3 of the Normal children came from these two classes. As significantly more ESN (M) children may be found in working than middle class homes (Kushlick and Blunden, 1974) matching children on this variable may have indicated whether or not some of the differences between children were related to SEC rather than educational placement. In other words, there is some possibility that the findings were confounded by SEC effects.

A final point under this section relates to the fact that only mothers were involved in the home-based data despite the increasing importance of fathers in the practicalities of caring

and day-to-day upbringing of children (Beail and Maguire, 1982). Their involvement would undoubtedly have added a valuable dimension to the research. One of the major constraints against their inclusion was one of time as data collection would have been increased by a further 50 per cent. In addition, it is likely that the number of families willing to participate might have been reduced even more. As a number of fathers did shift work, observation periods would have been further constrained.

#### 9.4.2 Validity and Reliability of Measures

The lack of relationship between home and school on the data from all measures has been discussed in terms of lack of mothers' and teachers' knowledge of how children behaved in school or home respectively; children's behaviour being situationally specific and/or the different implications mothers and teachers as a group give to the constructs supplied. A further possibility is that the measures themselves are neither valid nor reliable.

#### Observations

The purpose of the observations was to see if children behaved differently at home and at school, which would explain any difference in maternal and teacher perceptions. Results suggest that they do as a group, and there is no correlation between their behaviours in the two environments. But are the chosen categories of the behaviour valid? On face validity the verbal sub-categories would appear satisfactory, although it is possible that Verbal Care, which included chatter, praise and teaching by explanation, may be considered too wide a category. If categories had been more refined, then it is possible that results would have shown more similarities. It is accepted that, for the non-verbal measures of behaviour, a certain amount of inference is made in coding, although every attempt was made to code the behaviour according to overt behavioural criteria. Such inferences will directly affect the validity of the categories.

The most obvious question relating to the validity of the observations pertains to the effect of the observer on those being observed. In every class in which observations were made, teachers indicated that they did not feel that the class or the target

child behaved particularly differently from usual since the children were used to visitors. It is more likely, however, that teachers who were aware of being observed may have been influenced by my presence. Hopefully, the familiarisation period reduced observer effect, but is unlikely to have reduced it entirely.

With regard to home observations, observer effect is likely to have been more pronounced as none of the families had ever been observed before. It is possible that this had the effect of inhibiting more negative behaviour between children and parents who were on best behaviour. This certainly seemed to have been noticeable on at least one occasion, although there were occasions when family interactions appeared to indicate that my presence was at least temporarily forgotten.

Both coding and inter-rater reliability for school observations in general were obtained at sufficiently high levels of agreement using Cohen's Kappa, a strict measure of reliability. However, the lack of inter-rater reliability for the home observations is accepted as a defect. As discussed in the Methodology: Observations section, it was felt that the disruption to the home and family caused by a second observer coming along would have both biased the observations even more than by having a rater, and in some cases would have meant that the family decided not to participate.

Inter-rater reliabilities were made on three separate occasions but it was impossible to arrange a fourth session because of difficulties at the school. It is, therefore, possible that there may have been some observer drift towards the end of the period of collecting observation data. Unfortunately this was exclusively when observations of Normal children were being made. Thus differences between the two groups of children might marginally be due to this.

A further point concerns the analysis of the results. Essentially counting the frequencies of behaviour categories over an hour is the most simple method of analysis, and may well have missed the subtly different sequencing of interactions between mothers/teachers and children. To have obtained such sequencing, recording units would have needed to be smaller (15 compared to 60

second units) and this would have entailed more complex inter-rater and coding reliabilities. Perhaps it is here that the value of a running commentary of behavioural interactions can be seen to have most value. As the behaviour record stands at present it is possible that in the future it could be re-examined - along with the observation data obtained during the inter-rater reliability testing - and a sequential analysis might then be considered. As the data from the inter-rater reliability study is still available, it would be possible to examine whether the order of interactions recorded is reliable. This analysis might show whether ESN (M) and Normal children not only display and experience different types of behaviour at home and at school, but also whether their behaviour is differentially rewarded, ignored etc. Nonetheless, the differences in the frequencies of interactions and in the proportion of time each subcategory comprised which were found in the data indicate that the method of analysis used is not without value.

#### 9.4.3 Questionnaires

The analysis of the questionnaire data has shown that there were many areas where mothers and teachers did not agree in how they rated children. As already discussed in the Methodology: Questionnaire section, although the questions in their relevant sections were drafted a number of times and some pre-piloting was carried out to ensure that the wording was clear and that administration was as simple as possible, the questionnaire as a whole should only be considered as being in pilot form. As such, the validity of each question is perhaps not in doubt, but the groupings of questions under the various headings (e.g. Practical Self Care etc.) have not been validated. Thus further analysis of the relationship of questions to others in the same section as compared to the other questions in the rest of the questionnaire might be an area to pursue.

Partly because of this last point, questions were not totalled under each section into scale scores. In addition, it is questionable what further strength procedures such as totalling ratings for questions under a subheading and then describing a child as being socially sensitive to a greater or lesser degree, would give to the analysis. The results have indicated that a global descrip-



tion of ESN (M) children and adolescents as Friendly was probably less useful than a specific description of a child as getting on well with children known to him/her.

#### 9.4.4 Repertory Grids

In the Methodology section relating to repertory grids, I covered the arguments for using a consensus grid with given rather than elicited constructs. Given that the constructs were not those which mothers and teachers would have individually chosen, the results have shown that this method of data collection gave valuable insights into the way mothers and teachers perceived their own ESN (M) or Normal children in relation to other children.

However, because constructs were given, it is possible that had they been elicited for each subject there might have been greater or lesser consensus in how they described ESN (M) children. It is likely that while a number of constructs used would have been common to many grids there would have been those which might have been idiosyncratic to individuals. While these would have had particular meaning for the individual, analysis would have been complex and confusing. Nonetheless, both mothers and teachers did not appear to find any of the constructs outside their range of convenience in that in no case did they overtly show difficulty rating children along these constructs. In fact, when I asked about how they felt in completing the grid after all data had been collected, mothers and teachers indicated interest in what they had done, and on one or two occasions a mother or a teacher stated that the act of completing the grid had in itself proved to be a useful way putting their views of the target child into perspective.

In the end, the crux of the argument is whether this method of data collection was useful and of value. The data from grids is not meant to give information about the elements (in this case children) in the grid, but about the structure of that part of the mothers' and teachers' interpersonal space as defined by the given constructs and how the various elements relate to this. The results have justified the value and importance in considering this method of data collection in conjunction with the other data.

### 9.5 Summary and Conclusions

Nineteen children with moderate learning difficulties from four schools for the Educationally Subnormal (Mild) and 18 children from three Normal schools in inner London were observed at home with their mothers and at school with their teachers. Subsequently mothers and teachers completed a questionnaire relating to the social and independence skills of these children. A repertory grid was used to examine the frame of reference mothers and teachers used when judging children as socially mature.

Children were observed in their homes with their mothers, or at school with their main class teacher for one hour, subsequent to a period of familiarisation. Observations were recorded as a running narrative, using pencil and paper, with the focus of attention on fairly gross mother/child or teacher/child interactions. Behavioural categories were Control, Care, Initiation, Acceptance and Resistance, and recorded for all verbal and non-verbal interactions between adult and child. Inter-rater and coding reliabilities were obtained for the majority of behaviour categories, at a suitably high level.

The questionnaire focused on social and independence skills, covering Practical Self-Care, Independence, Social Awareness, Unexpected or Crisis Situations and Occupation. Questions generally fell into three categories: a) whether the child displayed a specific behaviour, or the frequency of such behaviour; b) reasons why it did not occur; and c) the competency with which mothers and teachers rated the child on a 5-point scale. A number of the questions related to specific skills which were judged to be subsumed by some of the supplied constructs in the repertory grid. Other questions went beyond these constructs, and extended information gathered from observations. At various times during compilation, the questionnaire was piloted amongst mothers and caretakers of handicapped so that that ambiguities both in wording and meaning were excluded. Questionnaires were completed after observations had been carried out, with each question being read out aloud to subjects. Subjects' verbal replies were recorded by the researcher.

The repertory grid consisted of ten elements (8 children and 2 adults) which each subject supplied to meet the given roles (e.g. Older child, Liked Adult). Mothers and teachers were required to rate these 10 elements across 10 bi-polar constructs which were supplied as differing aspects of social maturity. The constructs were chosen from a pool which had been selected by 38 independent judges, and which had then been put into an implications grid in order to find the most widely used and relevant descriptors. Mothers and teachers completed the repertory grid by rating each element on a 5-point scale for each construct, using a deck of cards, with the experimenter recording answers on the grid form.

In summary the results can be stated as follows:-

- 1) Children's non-verbal and verbal behaviour at home does not correlate with their behaviour at school (whether the children are ESN (M) or Normal).
- 2) Children's non-verbal and verbal environment as created by mothers and teachers does not correlate between home and school.
- 3) As a group, if ESN (M) children engage in or experience a behaviour more frequently than Normal children this tends to be resistance and control.
- 4) As a group, if Normal children engage in or experience a behaviour more frequently than ESN (M) children this tends to be care, initiation and acceptance.
- 5) Although ESN (M) and Normal children do not behave differently at school, teachers behave differently towards them.
- 6) Mothers and teachers generally do not differ in how they rate ESN (M) children as a group, although their ratings of children rarely correlate significantly. Even where there are significant correlations these are rarely above .40.
- 7) The same finding is also true of Normal children.
- 8) Specific questions on which mothers and/or teachers rate Normal children as more competent than ESN (M) children tend to be those questions where there is significant agreement between mothers' and teachers' ratings of the same ESN (M) children.

9) Mothers and teachers construe social maturity (in terms of the constructs given) in a similar manner.

10) ESN (M) children are rated as relatively mature by their mothers when compared with their teachers' ratings but as immature by their mothers when comparisons are made to mothers' rating their own Normal children.

11) Teachers not only rated ESN (M) children negatively compared with mothers' ratings, but also negatively compared with Normal children.

12) Normal children are perceived in a similar manner by their mothers and their teachers.

13) Some constructs (e.g. Understanding, Independent, Can make up own mind and in particular Friendly) have different specific implications for mothers and teachers of ESN (M) children.

14) Construing ESN (M) children in specific ways rarely relates to the kind of behaviour they display or experience from their mothers and teachers in terms of a number of constructs in the present study.

The results highlighted the important factors which emerge when ESN (M) children are evaluated: 1) that general perceptions of the children (such as friendly and independent etc.) have different implications for mothers and teachers; 2) that it is important to be exact and specific when comparisons are made between mothers' and teachers' ratings; and 3) that behaviour may be situation-specific and thus its context has to be taken into consideration when children are assessed.

A critical evaluation of aspects of the study suggested that results could only be generalised if a larger sample from a wider population could be involved, and matched on at least age and SEC with the Normal sample. Sequential analysis of the observation data was suggested as possibly giving further information about children's behaviour at home and at school and the contingent behaviour of mothers and teachers respectively. It was accepted that the questionnaire should be considered only as a pilot in its present form. The use of repertory grids in this study although

some way from Kelly's (1955) original application was seen to bring additional understanding to the results from the rest of the data.

#### 9.6 Implications and Recommendations

To return to the beginning of the thesis, I suggested that prior knowledge or information influenced how we interpret what we see, and this in turn affects the kinds of questions we ask about things.

The results of this study indicate that young adolescents with moderate learning difficulties are perceived very differently by their mothers and their teachers, mothers' perceptions being based on their children's behaviour at home, and teachers' on children's behaviour at school. The study found that children's behaviour in the two environments rarely correlated. As well, the results indicated that there was little correlation between mothers' and teachers' specific assessments of children's capabilities, except where these might be used as criteria for distinguishing ESN (M) children from their Normal peers, i.e. they agreed about their deficits more readily than about their assets.

It appears that children are well aware of how teachers rate them (Nash, 1973) and no doubt are equally appreciative of their parents' assessments of their skills. The importance of emphasizing children's assets as well as acknowledging their deficits cannot be too heavily underlined. Berson (1975) had found significant relationships between children's self-perceived behaviour, their intellectual and school status, and perceived parental control. Again it is possible to hypothesize that perceived teacher control may also be related to children's self-image. Thus the importance of a positive assessment of children's skills by both mothers and teachers to create a positive self-image in children.

There are three important implications. Firstly, as Spooner (1982) and Savage (1977) underlined, the importance of clear communication from teachers to parents cannot be overrated. Despite the full time-table of staff, it would seem a necessary step for teachers to actively seek the fullest co-operation and channels of

communication between themselves and parents. This does not just mean open access to headteachers and classrooms, parents' meetings at the school etc., but, if necessary, teachers approaching parents in their homes as a matter of policy, at the same time accepting parents's wish for privacy, and their legitimate desire not to become involved in their children's education unless they choose.

Secondly, because, agreement between mother' and teachers' specific assessments tended to be over those skills where ESN (M) children were more often seen as significantly less capable than children in Normal schools in this study, it would be appropriate that parent-teacher communication channels be fostered initially in terms of looking at the agreed assets and skills which they felt children had. This could then lead to both teachers and parents explaining the different skills these children displayed in the classroom and the home, and encourage the generalisation of skills and desired behaviour across different environments where this was appropriate. In this way parents could be involved in making decisions about their children's social and independence skills training, and express their possible fears and concerns that their child was not quite 'ready' to start such programmes (Mittler and Mittler, 1982). Advice and information could also flow between home and school. In this way, anxieties and misunderstandings might be reduced and children would be more likely to benefit from a consistent and integrated approach to their social development.

At the same time, the difference in children's behaviour and in what they experience in the two environments is not necessarily detrimental. In fact, there may be a very positive side to children experiencing different interactions at home and at school, and in their ability to act and react differently, in that they can learn and develop differing skills and roles essential for the varied experiences they will meet in adult life. What is important is that neither parents nor teachers assume that the differing aspects of the child's behaviour they perceive are the only ways in which the child can behave. If that should occur, there is fertile ground for disagreement between home and school about skills, and the goal of education programmes.

This does not mean parents and teachers need to agree over every aspect of a child's skills, and indeed it is unlikely that they will. What is important is that parents and teachers are aware of the other's perceptions of the same child, and appreciate why their perceptions may differ. This way they are both more likely to understand the questions which are asked of them. As discussed in the Introduction, the individual's judgments about the individual and society, normality and deviancy, disablement and handicap will affect how he or she perceives individual children with or without special needs. There needs to be a shared understanding of these as well. This, of course, ties in with the role of parents as partners in Special Education, as emphasised in recent legislation.

Thirdly, what needs to be reiterated is that parents, like their ESN (M) children, are unique and do not form a homogenous group. The results of the questionnaire in particular have shown that teachers and mothers of ESN (M) children rarely disagree how they rate ESN (M) children as a group. Yet, correlations between mothers' and teachers' ratings of the same children were rarely found to be significant. (The same can also be said, of course, of parents of Normal children.) And, as Berson (1975) found, teachers of children with special needs are not a homogenous group.

Smith and Sykes (1981) suggest that parents may need to be both encouraged and taught how to engender social and independence skills in their adolescent sons and daughters with moderate learning difficulties. Closer parent/teacher liaison can make this possible and lead to teachers' understanding of parents' perception of their children (and the reverse). This can also lead teachers to appreciate the wealth of knowledge that parents have about their children, and value and learn from parents' experience of their child.

These points need to be seen within the present context of integration, particularly if behaviour problems and teachers' ability to handle them are seen as important factors relating to integrating Special Children into Normal schools (Feldman and Altman, 1985). This may be enhanced not only by early teacher participation in integration plans (Hegarty, 1982), classroom assistants and in-service training etc., but also by supportive

and active help and co-operation with parents who have valuable information and skills to offer.

The more hopeful outlook that Savage (1977) found amongst teachers than amongst mothers with regard to eventual independence skills may reflect teachers' confidence in teaching these skills. Even greater progress may be made if mothers can also be given confidence in their children to allow them to carry out these skills. The changes in the education of children with special needs which has taken place need to be explained carefully to parents, emphasizing the need for fitting the most appropriate resources to the individual child's needs within the existing education system.

What in the end is most important is that where inconsistencies exist they do not lead to an entrenched view of ESN (M) children, and at the same time there is a shared understanding between parents and teachers of their different views of the same children. Appreciating the different implications that constructs hold for mothers and teachers and the importance of the different social contexts which children experience at home and at school are necessary to achieve this shared understanding. In fact it is the creative act of understanding the other's point of view which may lead to a reformulation by both mothers and teachers of how they perceive ESN (M) children and adolescents, and thus how they interact with their children which will hopefully be to the benefit of both the children and their mothers and teachers.



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APPENDIX 1

Dear Parent,

The Headteacher of the school has agreed to let me contact you.

I am looking at the different things children between the ages of 12 and 15 years do at home and at school; and at the different ways parents and teachers see how children cope with growing up.

I would like to talk to parents and teachers about this, and as your child is between 12 and 15 years, I wonder if you would agree to help me.

At first, this would mean that I visited you at your home so that I could tell you a little about what I am doing. When I have explained, you will then be quite free to say if you do not want to help any further. However, if you would like to help, we could then arrange a number of other visits (up to 3) over the following 2/3 weeks, to be arranged when it would be most convenient to you.

I hope I shall not intrude too much into your home, but would sincerely appreciate your help. If you agree, could you complete the form at the bottom of this page, and return it to the Head as soon as possible.

Thank you, and I look forward to meeting you.

Yours sincerely,

Judith Middleton

-----  
TICK HERE IF YOU AGREE:

I agree to let Judith Middleton visit me at home and talk to me about my child.

Signature:

Name:

Telephone No.:

Address:

To: THE HEADTEACHER

QUESTIONNAIRE TO

PARENTS AND TEACHERS OF E.S.N. (M.)  
CHILDREN

1) BACKGROUND INFORMATION

CHILD NO. \_\_\_\_\_

TEACHER NO. \_\_\_\_\_

SCHOOL NO. \_\_\_\_\_

a) To be completed by mothers

AGE: \_\_\_\_\_

DATE OF BIRTH: \_\_\_\_\_

AGE AND SEX OF SIBLINGS: \_\_\_\_\_

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

MOTHER'S OCCUPATION: \_\_\_\_\_

FATHER'S OCCUPATION: \_\_\_\_\_

ETHNIC ORIGIN: \_\_\_\_\_

b) To be completed by teachers

Child's IQ: \_\_\_\_\_

Date of last test: \_\_\_\_\_

YEARS SINCE LAST TEST: \_\_\_\_\_

TEACHER'S JUDGMENT OF ACCURACY OF IQ SCORE AT PRESENT \_\_\_\_\_

NUMBER OF TERMS TEACHER HAS KNOWN CHILD: \_\_\_\_\_

TEACHER'S SEX: \_\_\_\_\_



2) PRACTICAL/SELF CARE

Personal Care

		Mother rating	Teacher rating
1a	Does s/he dress her/himself completely without help ?	Always Nearly Always Sometimes Rarely Never	1 2 3 4 5
1b	If never or rarely, why ?	Handicapped Normal for age Family policy No opportunity (in area) Child's Personality Appropriate for child's sex Do not know	1 2 4 5 6 7 8
1c	How well does s/he dress her/himself ?	Very well Well Fair Poor Very Poor	1 2 3 4 5
2a	Does s/he wash/bath her/himself completely without help ?	Always Nearly Always Sometimes Rarely Never	1 2 3 4 5
2b	If never or rarely, why ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appropriate for child's sex Do not know	1 2 4 5 6 7 8
2c	How well does s/he do it ?	Very well Well Fair Poor Very poor	1 2 3 4 5
3a	Does s/he keep her/his personal belongings tidy ?	Always Nearly always Sometimes Rarely Never	1 2 3 4 5
3b	If never or rarely why ?	Handicapped Normal for age School policy Family policy No opportunity (area) Child's personality Appro. for child's sex	1 2 3 4 5 6 7

		Mother Rating	Teacher Rating
3c	How much reminding does s/he need ? A lot Quite a lot Some Little None	5 4 3 2 1	5 4 3 2 1
<u>Economic Skills</u>			
4a	Does s/he have pocket money ? Yes No	1 2	/
4b	If not, why not ? Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	/
4c	How sensibly does s/he spend it ? Very well Well Fair Poor Very poor	1 2 3 4 5	/
5a	Does s/he spend it with help/direction ? Always Nearly always Sometimes Rarely Never	5 4 3 2 1	/
5b	If with help/direction why? Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	/
5c	How good is s/he at saving/ budgetting pocket money ? Very good Good Fair Poor Very poor	1 2 3 4 5	/
6c	How well does s/he under- stand £s and pence ? (e.g. give change for £5) Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5

		Mother Rating	Teacher Rating
7c	How well does s/he understand the value of money ? Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
8a	Does s/he ever do any shopping for you ? Yes No	1 2	1 2
8b	If not, why not ? Handicapped Normal for age School policy Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
8c	How much shopping can s/he do by her/himself ? Weekend shopping with list 2/ items without instructions 2/3 items with instructions or 1 item without instructions 1 item with instructions Cannot shop alone	1 2 3 4 5	1 2 3 4 5
<u>Domestic Skills</u>			
9a	Does s/he help about the house ? Always (daily) Nearly awlays (2 or 3 times weekly) Sometimes (1 time a weekly) Rarely (once a month) Never	1 2 3 4 5	
9b	If not, why not ? Handicapped Normal for age School policy Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 3 4 5 6 7 8	
9c	How helpful is s/he at this ? Very good Good Fair Poor Very poor	1 2 3 4 5	

		Mother Rating	Teacher Rating
10a Does s/he make her/his own bed ?	Always (daily) Nearly always (2 or 3 times weekly) Sometimes (once a week) Rarely (once a month) Never	1 2 3 4 5	
10b If not, why not ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	
10c How well does s/he do it ?	Very well Well Fair Poor Very poor	1 2 3 4 5	
11a Does s/he ever make a cup of tea/coffee ?	Very frequently Frequently (2 or 3 times weekly) Sometimes (once a week) Rarely (once a month) Never	1 2 3 4 5	1 2 3 4 5
11b If not, why not ?	Handicapped Normal for age Family Policy No opportunity Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	1 2 4 5 6 7 8
11c How much help does s/he need to have to do this ?	No help Occasional verbal reminder Verbal instructions each time Some practical help Cannot do unless with considerable help	1 2 3 4 5	1 2 3 4 5
12a Does s/he ever make a simple meal ?	Very frequently (daily) Frequently (2 or 3 times weekly) Occasionally (once a week) Rarely (once a month) Never	1 2 3 4 5	1 2 3 4 5

12b If not why not ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	1 2 4 5 6 7 8
12c How much help does s/he need to do it ?	No help Occasional verbal reminder Verbal instructions each time Some practical help Cannot do unless with considerable help	1 2 3 4 5	1 2 3 4 5
13a Does s/he have a single daily task to do ?	Yes No	1 2	1 2
13b If not, why not ?	Handicapped Normal for age School policy Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
13c How good is s/he about doing this without being reminded ?	Very good Good Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
14a Does s/he have a number of daily tasks to do ?	Yes No	1 2	1 2
14b If not, why not ?	Handicapped Normal for age School policy Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8

17a Does s/he travel for longer distances alone (over 30 minutes)	Yes No Do not know	1 2	1 2 8
17b If not, why not ?	Handicapped Normal for age School policy Family policy Child's personality No opportunity (area) Appro. for child's sex Do not know	1 2 3 4 6 5 7 8	1 2 3 4 6 5 7 8
17c How well do you think s/he can/could manage ?	Completely without help Collected or taken to bus stop Collected and taken to bus stop; buys own ticket Collected and taken to bus stop etc.; ticket bought or given exact fare Cannot travel alone	1 2 3 4 5	1 2 3 4 5
19a Does s/he ever go out in the evening without you accompanying her/him ?	Yes No	1 2	/
19b If not, why not ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	/
20a Does s/he ever go out alone in the evening (to play etc)	Yes No	1 2	/
20b If not, why not ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	/
21a Does s/he ever go out with friends in evening ?	Yes No	1 2	/
21b If not, why not ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	/

14c How good is s/he at doing this without being reminded ?	Very good Good Fair Poor Very Poor	1 2 3 4 5	1 2 3 4 5
15a Does s/he help with general classroom tasks ?	Very frequently (daily) Frequently 2 or 3 times a week Sometimes (once a week) Rarely (once a month) Never		1 2 3 4 5
15b If not why not ?	Handicapped Normal for age School policy Child's personality Apprø. for child's sex Do not know		1 2 3 6 7 8
15c How well does s/he help ?	Very well Well Fair Poor Very poor		1 2 3 4 5
3) <u>INDEPENDENCE</u>			
<u>Autonomy</u>			
16a Does s/he travel on public transport alone for short distances (10/15 Minutes)	Yes No Do not know	1 2	1 2 8
16b If not, why not ?	Handicapped Normal for age School policy Family policy Child's personality No opportunity (area) Apprø. for child's sex Do not know	1 2 3 4 6 5 7 8	1 2 3 4 6 5 7 8
16c How well do you think s/he could/can manage ?	Completely without help Needs to be collected at bus stop etc. or taken to start of journey Needs to be taken and collected from bus stop etc.; but buys own ticket Collected and taken to bus stop etc.; ticket bought or exact money given to her/him Cannot travel alone	1 2 3 4 5	1 2 3 4 5

22a Does s/he belong to a club etc. ?	Yes No	1 2	
<u>Self-Sufficiency</u>			
23a Is s/he ever at home alone ?	Yes No Do not know	1 2	1 2 8
23b If not, why not ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7	1 2 4 5 6 7 8
24a How long do you feel s/he can be left alone ?	Over 2 hours $\frac{1}{2}$ - 2 hours Under $\frac{1}{2}$ hour Just a few minutes Never	1 2 3 4 5	1 2 3 4 5
24c How happy would/do you feel about her/him being left alone ?	Very happy Happy Not very happy Slightly worried Worried	1 2 3 4 5	1 2 3 4 5
25c How does s/he like being left alone ?	Hates being left alone Does not like being left alone Does not really mind Quite happy being alone Really like being left alone	5 4 3 2 1	5 4 3 2 1
26a Does s/he play alone outside in garden/yard ?	Yes No Do not know	1 2	1 2 3
26b If not why not ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	1 2 4 5 6 7 8
27a Does s/he play alone in local park, street or playground ?	Yes No Do not know	1 2	1 2 3



27b If not, why not ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	1 2 4 5 6 7 8
<b>4) <u>SOCIAL AWARENESS</u></b>			
<b>a) <u>Relationships</u></b>			
28a Does s/he have a close friend(s) ?	Yes No	1 2	1 2
28b If not, why not ?	Handicapped Normal for age School policy Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
29a Does s/he have many acquaintances, i.e. is s/he fairly popular ?	Yes No	1 2	1 2
29b If not, why not ?	Handicapped Normal for age School policy Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
29c How well does s/he make and keep friends ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
30c How well does s/he get on with known adults ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
31c How well does s/he get on with adults who are strangers when it is appropriate ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5

32c	How well does s/he get on with children s/he knows ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
33c	How well does s/he get on with children s/he has not met before ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
34a	Do you have pets/animals ?	Yes No	1 2	1 2
34c	How well does s/he get on with animals/pets ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
35a	Does s/he show any interest in the opposite sex ?	Yes No	1 2	1 2
35b	If not, why not ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	1 2 4 5 6 7 8
36a	Does s/he have a boy/girl-friend ?	Yes No Do not know	1 2	1 2 8
36b	If not, why not ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	1 2 4 5 6 7 8
37a	Does s/he go out with her/his boy/girlfriend ?	Yes No	1 2	

37b If not, why not ?	Handicapped Normal for age Family policy No opportunity (area) Child's personality Appro. for child's sex Do not know	1 2 4 5 6 7 8	
37c How happy are you about her/him going out ?	Very happy Happy Not sure Not very happy Disapprove	1 2 3 4 5	
38a Does s/he know about the facts of life/sex ?	Yes No Do not know	1 2 8	1 2 8
38b If not, why not ?	Handicapped Normal for age School policy Family policy Child's personality Appro. for child's sex Do not know	1 2 3 4 6 7 8	1 2 3 4 6 7 8
38c How well do you think s/he understands ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
<u>Social Sensitivity</u>			
39c How well can s/he cooperate with other people ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
40c Does s/he interrupt when other people are speaking?	Very much Quite a lot Sometimes Rarely Never	5 4 3 2 1	5 4 3 2 1
40b If so, why do you think s/he does so ?	Handicapped Normal for age School policy Family policy Child's personality Appro. for child's sex Do not know	1 2 3 4 6 7 8	1 2 3 4 6 7 8

41c	How sensitive is s/he of other people's feelings towards him/her ?	Very sensitive Quite sensitive Moderately sensitive Not very sensitive Virtually insensitive	1 2 3 4 5	1 2 3 4 5
42c	How accurate is s/he in judging other's feelings towards her/him ?	Very good Good Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
42b	If poor, why do you think this is so ?	Handicapped Normal for age Family policy School policy No opportunity Child's personality Appro. for child's sex Do not know	1 2 4 3 5 6 7 8	1 2 4 3 5 6 7 8
43c	How well can s/he understand other people's feelings when they are not directed at her/him ? eg. if you are feeling sad/angry about something which has nothing to do with her/him.)	Very good Good Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
44c	How well does s/he understand about turn taking and sharing ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
5) <u>UNEXPECTED OR CRISIS SITUATIONS</u>				
<u>Personal</u>				
45c	Can s/he overcome or work out minor practical problems for her/himself ? (e.g. opening packages or finding articles missing from their usual place.)	Yes No	1	1
	If no, how much help does s/he need ?	Only very little help Needs some help from time to time Needs considerable help quite often Really cannot cope unless has help	2 3 4 5	2 3 4 5

46d	What happens when s/he fails at a task ?		
	Loses temper	1	1
	Does not try again	2	2
	Needs encouragement and becomes anxious	3	3
	Appears to ignore failure	4	4
	Tries again	5	5
46c	How good is s/he at coping with her/his own failure at a task ?		
	Very good	1	1
	Good	2	2
	Fair	3	3
	Poor	4	4
	Very poor	5	5
47c	How good is s/he at coping when s/he does not have her/his own way over something ?		
	Very good	1	1
	Good	2	2
	Fair	3	3
	Poor	4	4
	Very poor	5	5
47d	If poor, what does s/he do ?		
	Loses temper	1	1
	Sulks and pouts	2	2
	Becomes anxious; cries	3	3
	Withdraws	4	4
48c	How good is s/he at coping with unforeseen mishaps or disappointments ?		
	Very good	1	1
	Good	2	2
	Fair	3	3
	Poor	4	4
	Very poor	5	5
48d	If poor, what does s/he do ?		
	Loses temper	1	1
	Sulks and pouts	2	2
	Becomes anxious; cries	3	3
	Withdraws	4	4
49c	How good is s/he at coping with criticism or reproof ?		
	Very good	1	1
	Good	2	2
	Fair	3	3
	Poor	4	4
	Very poor	5	5
49d	If poor, what does s/he do ?		
	Loses temper	1	1
	Sulks and pouts	2	2
	Becomes anxious; cries	3	3
	Withdraws	4	4
50d	What happens when you ask her/him to do something		
	Always does what s/he is asked	1	1
	Generally does what s/he is asked	2	2
	Sometimes does what s/he is asked	3	3
	Rarely does what s/he is asked	4	4
	Never does what s/he is asked	5	5

Social

51c How calm and sensible is s/he if you get separated on an outing ?	Very good Good Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
52c How good would s/he be in coping with a minor incident (e.g. someone cutting themselves, or spilling something on the carpet etc. ?	Very good Good Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
53a Has s/he ever had to deal with an emergency ? (e.g. dialling 999 etc.)	Yes No Do not know	1 2	1 2 8
53c How well did s/he manage ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
54a Does s/he know how to use the telephone ?	Yes No Do not know	1 2	1 2 8
<b>6) OCCUPATION</b>			
<u>General Alertness and Interest</u>			
55c How interested is s/he with what people are doing around her/him ?	Very interested Fairly interested Occasionally interested Rarely interested Generally not interested	1 2 3 4 5	1 2 3 4 5
56c How curious (enquiring) is s/he about new objects in the room, new people, new tasks etc. ?	Very curious Fairly curious Occasionally curious Rarely curious Never seems to be curious	1 2 3 4 5	1 2 3 4 5
57a Does s/he ever look at TV news/listen to the radio/look at newspapers ?	Yes No Do not know	1 2	1 2 8

57b If not, why not ?	Handicapped Normal for age Family policy Child's personality Do not know	1 2 4 6 8	1 2 4 6 8
57c How interested is s/he in what is going on in the news ?	Very interested Fairly interested Occasionally interest Rarely interested Not interested at all	1 2 3 4 5	1 2 3 4 5
<u>Work Skills</u>			
58c How much praise/approval/encouragement does s/he need to complete a task/job ?	Only on very special tasks Just a little now and then Some from time to time Considerable quite often Needs a lot if s/he is to complete a task	1 2 3 4 5	1 2 3 4 5
59c How well can s/he concentrate on a task/job ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
60c How well can s/he organise her/himself to get a task/completed ?	Very well Well Fair Poor Very poor	1 2 3 4 5	1 2 3 4 5
<u>Future Plans</u>			
61a Have you ever heard her/him talk about what s/he wants to do in the future ?	A great deal Quite often Sometimes Hardly ever Never	1 2 3 4 5	1 2 3 4 5
61b If not, why do you think this is so ?	Handicapped Normal for age School policy Family policy Child's personality Appro. for child's sex Do not know	1 2 3 4 6 7 8	1 2 3 4 6 7 8

61e What kind of plans does s/he talk about ?

-----  
 Coded according to Socio- S.E.C. Class 1  
 economic class Class 2  
 Class 3 N.M.  
 Class 3 Man.  
 Class 4  
 Class 5  
 Other

1	1
2	2
3	3
4	4
5	5
6	6
7	7

62c How realistic are her/his hopes/plans ?

Very realistic  
 Quite realistic  
 Possibly realistic  
 Not very realistic  
 Completely unrealistic

1	1
2	2
3	3
4	4
5	5



APPENDIX 3Personal Construct Psychologya) Constructive Alternativism

The basic philosophic assumption from which Personal Construct Psychology (PCP) is derived is constructive alternativism. Kelly (1955, 1963) wrote:

'The universe is real; it is happening all the time; it is integral, and it is open to piecemeal interpretations. Different men construe it in different ways...' (p.43)

'...We assume that all our present interpretations of the universe are subject to revisionism or replacement... there are always alternative constructions available to choose among in dealing with the world.' (p.15)

In other words, although Kelly did not deny there was an absolute truth or reality, as some of his critics suggest he did (Mischel, 1968), he believed we are unable to get at the truth without interpretation from our own experience. In this sense, we cannot determine conclusively what is true or absolute, as there are always a number of ways in which we can interpret events. The individual's view of the world is not of the world as it is, but an interpretation of it. This logically implies that each individual may have a different view of the world, and that each view need not necessarily be considered right or wrong. The validity of our view is not whether it corresponds to reality, but whether our interpretation is found to be coherent and useful (Warren, 1964, in Adams-Webber, 1976, p.16).

From this assumption, Kelly suggested that man is like a scientist testing out various hypotheses about events. He considers how one interpretation may be useful in predicting the future. Interpretations which are unsuccessful can be rejected or revised until an alternative proves to be more useful. In this way, man constructs a network of hypotheses with which to understand the world about him. As such, constructive alternativism is a creative, pragmatic and dialectic 'as if' philosophy.

### b) Fundamental Postulate

If this is borne in mind, then Kelly's psychology of personal constructs is more easily understood. The kernel of the theory is stated succinctly in the fundamental postulate of PCP.

'A person's processes are psychologically channelized by the ways in which he will anticipate events'. (Kelly, 1955: p.46)

To put this in more simple terms, the individual chooses how to act and anticipate the future by reflecting on what he has experienced in the past. Two important points to emphasise are (1) that it is the individual who chooses how events are anticipated; and (2) that man does not react to the past, but creatively anticipates the future. It is a theory about the psychological organisation of how people structure their experience in order to maximise successful predictions about the future.

### c) The Eleven Corollaries

Although the fundamental postulate encapsulates PCP, Kelly elaborated the theory further in eleven corollary statements.

The structure of the individual's psychological organisation is composed of a finite number of constructs, which are within a hierarchical network. A construct is any discrimination between events which the individual uses to sort between those which are similar and those which are different in order to help anticipate the future (construction corollary). For instance, Tom, Dick and Harry are men, but Mary and Jane are women. The construct here is men/women. Constructs can be at varying levels of abstraction from very concrete, specific discriminations (such as pencil/not pencil), to abstract, general discriminations (such as true/false). Fransella (1981) writes:

'Prediction is the essential feature of a construct.'  
(p.152)

When we construe - the act of discriminating between events - that Tom is a man, we anticipate that he will show some characteristics which we associate with men rather than women. Likewise, if we construe the floor is solid, we are predicting that if we walk across it, it will support and prevent us from falling through to the room below.

Each construct has a limited use or range in its predictive power (range corollary). We may use the construct hard/soft to say something about floors, but are unlikely to use it to predict something about flowers. Specific concrete constructs are more likely to have a narrower range of application than general, more abstract constructs.

It may have become apparent from the above that a feature of constructs is that they have two poles - like and unlike (dichotomy corollary). Although we may use only one pole, e.g. Harry, implicit in the discrimination 'This is Harry', is the decision that other men are not Harry.

Constructs, of course, may overlap. Kelly's organisation corollary suggests they are related in some hierarichical order. Some constructs are superordinate (more all embracing), and some are subordinate. The whole system of relationships between constructs can be seen as a pyramid of great complexity, consisting of a number of sub-systems. The organisation may be tight (with clear, well linked structures), or loose (when the links between constructs are more vague and often blurred). The more superordinate the construct the greater the number of implications and links it has. Because of this, the individual will resist changing the more superordinate constructs as this will have wide implications for him.

Hinkle (1965) has argued that it is the implications of the construct that give it meaning. If constructs were absolutely discrete, they would be meaningless. For instance, to appreciate that Harry is generous, it is necessary to know what is implied by, and what implies, generosity, as opposed to meanness.

Yet despite the hierarchical relationships in the construct system, we may still hold inconsistent or illogical constructs (fragmentation corollary). Because we are continually revising constructs as we continually receive new experience, conflicting information may be held within two sub-systems. These inconsistencies may be resolved by more superordinate constructs.

The last point underlines an essential feature of PCP, that the individual's construct system is not inflexible or static, but

constantly open to revision because of new information (experience corollary). We can modify constructs and how we anticipate the future as we reflect on new experience. Living, then, is a constant process of learning and changing. Of course, some constructs are not as open to change as others (modulation corollary). A construct's permeability is the ease with which new information can be incorporated into it. The range of use for a construct (or sub-system) may be extended or restricted as fresh events are encountered. If the range is expanded, it will be possible to use the construct to predict a wider range of events. If it is restricted, the construct will no longer be used to predict as many events as before. Superordinate and more general constructs are more likely to be more permeable than specific discrete constructs.

In all this, there is a choice. When we choose (choice corollary) to construe that Harry is a generous man, we do so because we feel that this prediction will help us make more sense of what he does and prove more reliable than other constructs.

The question of choice refers back to the fundamental postulate that PCP is a theory of personal/individual choice. How I choose to construe Harry may not be the same way as you construe him (individuality corollary), because I can make more sense of Harry using my constructs rather than yours (and vice versa). In addition, the organisation of our construct systems is likely to be idiosyncratic and unlike that of anyone else. Our experience has been different, so our constructs may have different implications.

This does not mean that views cannot be shared (commonality corollary). On the contrary, it is possible that, as there are many different standpoints from which to view the world, any one of which the individual can choose personally, he may choose to construe an event in the same way as someone else. Equally, you and I may have different experiences which we may still understand in the same way, because we use the same constructs in a similar manner to give meaning to our experience.

Apart from this, it is still possible to understand the other's point of view - how others construe events, even if they do not use the same constructs as ourselves (sociality corollary). In

this way PCP is not a solopsistic theory. In fact, by actively understanding the constructs of another, it is possible we shall reconstrue an event in a way that we would not have done before, and in as much as we have tried to understand another's construct, the other may also reconstrue the event because of our intervention.

APPENDIX 4.1LIST OF BI-POLAR CONSTRUCT PAIRS IN PRE-PILOT TRIAL

CLEVER	-	STUPID
GOOD	-	NAUGHTY
OBEDIENT	-	DISOBEDIENT
INDEPENDENT	-	DEPENDENT
HAPPY	-	SAD
FRIENDLY	-	UNFRIENDLY
HELPFUL	-	UNHELPFUL
OUTGOING	-	INWARD LOOKING
KIND	-	UNKIND
SENSITIVE TO OTHERS	-	INSENSITIVE
GENEROUS	-	MEAN
PRACTICAL	-	IMPRACTICAL
AUTHORITATIVE	-	PASSIVE/EASILY LED
RESPONSIBLE	-	IRRESPONSIBLE
ADVENTUROUS	-	TIMID
SUCCESSFUL	-	UNSUCCESSFUL

## APPENDIX 4.2

WHICH OF THE WORDS/PHRASES WOULD YOU USE TO DESCRIBE AN ADULT IN TERMS OF SOCIAL MATURITY? PLEASE TICK ALL THE RELEVANT WORDS

---

RESPONSIBLE	SENSITIVE	DISRUPTIVE
FRIENDLY	CONVENTIONAL	GAY (HAPPY)
HAPPY	AUTHORITATIVE	CAN MAKE UP OWN MIND
PURPOSEFUL	IRRESPONSIBLE	IMPRACTICAL
DEPENDENT ON OTHERS	DOWN TO EARTH	DULL
INTELLIGENT	SAD	NO SENSE OF HUMOUR
DISOBEDIENT	UNCONVENTIONAL	RELIABLE
POSITIVE	INWARD LOOKING	UNHELPFUL
OBEDIENT	CALM	MEAN
HELPFUL	SUCCESSFUL	GOOD
ALWAYS NEEDS PEOPLE AROUND	MEAN	INDEPENDENT
STUPID	RESTLESS	CALLOUS
SENSE OF HUMOUR	PRACTICAL	NAUGHTY
EASILY LED	BASHFUL	HEAD IN CLOUDS
UNKIND	CAN BE HAPPY ALONE	ALOOF
UNRELIABLE	HOSTILE	FAILURE
TIMID	COLD	AFFECTIONATE
CONSTRUCTIVE	PROUD	FUNNY
GENEROUS	UNDERSTANDING	TOLERANT
OUTGOING/EXTROVERT	INNOVATIVE	CONFIDENT

---

ARE THERE ANY MORE WORDS/PHRASES YOU WOULD USE? IF SO, PLEASE LIST THEM BELOW:

THANK YOU FOR YOUR HELP

ELEMENTS

CAN MAKE UP OWN MIND  
 HELPFUL  
 FRIENDLY  
 RESPONSIBLE  
 INDEPENDENT  
 CALM  
 SENSE OF HUMOUR  
 POSITIVE  
 UNDERSTANDING  
 (sensitive)  
 PRACTICAL

CHILD										
NORMAL CHILD SAM										
OLDER CHILD/SIBL										
YOUNGERCHILD/SIB										
DARE DEVIL CHILD										
GOOD CHILD										
CLOSE ADULT FRIE										
DIFFICULT CHILD										
MATURE CHILD										
DISLIKED ADULT										

CANNOT MAKE UP OWN MIND  
 UNHELPFUL  
 UNFRIENDLY  
 IRRESPONSIBLE  
 DEPENDENT  
 ANXIOUS  
 NO SENSE OF HUMOUR  
 NEGATIVE  
 INSENSITIVE  
 IMPRACTICAL

CONSTRUCTS



APPENDIX 5KEY TO BEHAVIOUR CATEGORIES IN OBSERVATIONSAdult Verbal Behaviour

HV1	Home Adult Control	SV1	School Adult Control
HV2	Home Adult Care	SV2	School Adult Care
HV3	Home Adult Initiation	SV3	School Adult Initiation
HV4	Home Adult Acceptance	SV4	School Adult Acceptance
HV5	Home Adult Resistance	SV5	School Adult Resistance

Adult Non-Verbal Behaviour

HN1	Home Adult Control	SN1	School Adult Control
HN2	Home Adult Care	SN2	School Adult Care
HN3	Home Adult Approach	SN3	School Adult Approach
HN4	Home Adult Acceptance	SN4	School Adult Acceptance
HN5	Home Adult Resistance	SN5	School Adult Resistance

Child Verbal Behaviour

CV1	Home Child Control	VC1	School Child Control
CV2	Home Child Care	VC2	School Child Care
CV3	Home Child Initiation	VC3	School Child Initiation
CV4	Home Child Acceptance	VC4	School Child Acceptance
CV5	Home Child Rejection	VC5	School Child Rejection

Child Non-Verbal Behaviour

CN1	Home Child Control	NC1	School Child Control
CN2	Home Child Care	NC2	School Child Care
CN3	Home Child Approach	NC3	School Child Approach
CN4	Home Child Acceptance	NC4	School Child Acceptance
CN5	Home Child Rejection	NC5	School Child Rejection

For a detailed description of each behaviour category see Observation Methodology Chapter.

## APPENDIX 5.1

PEARSON CORRELATION CO-EFFICIENT: CHILD VERBAL BEHAVIOUR AT HOME  
AND AT SCHOOL

A) ESN (M) Children (N = 19)

	CV1	CV2	CV3	CV4	CV5	VC1	VC2	VC3	VC4	VC5
CV1		.41	.35	.26	.36	.15	.25	.35	.08	.20
CV2			.70**	.18	.41	.05	.05	.13	.05	.07
CV3				.20	.46*	-.15	-.31	-.07	-.18	.01
CV4					.37	.35	.16	.17	.15	.19
CV5						.21	.20	.26	-.03	.18
VC1							.77**	.71**	.62**	.48*
VC2								.76**	.52*	.49*
VC3									.70**	.34
VC4										.49*

B) Normal Children (N = 18)

	CV1	CV2	CV3	CV4	CV5	VC1	VC2	VC3	VC4	VC5
CV1		.36	.35	.35	.42	-	.39	.68**	.36	.22
CV2			.58*	.73**	.61**	-	-.31	.03	-.01	.00
CV3				.61**	.65**	-	-.04	.18	.54*	-.11
CV4					.41	-	-.34	-.06	-.13	-.27
CV5						-	-.04	.06	.22	.00
VC1										
VC2								.70**	.46	.32
VC3									.60**	.60**
VC4										.36

\* P&lt;0.05 (Two-tail)

\* P&lt;0.01 (Two-tail)

(No Child Verbal Control recorded in school for normal children)

## APPENDIX 5.2

PEARSON CORRELATION CO-EFFICIENT: ADULT VERBAL BEHAVIOUR AT HOME  
AND AT SCHOOL

A) ESN (M) Children (N = 19)

	HV1	HV2	HV3	HV4	HV5	SV1	SV2	SV3	SV4	SV5
HV1		.61**	.42	.62**	.73**	.17	-.20	.08	.25	.19
HV2			.51*	.43	.50*	-.23	-.39	-.20	-.01	-.15
HV3				.32	.42	-.19	-.46*	-.33	-.11	-.12
HV4					.51*	.24	-.03	.12	.48*	.39
HV5						-.03	-.16	.06	.14	.33
SV1							.46*	.65**	.62**	.70**
SV2								.80**	.48*	.56*
SV3									.73**	.70**
SV4										.62**

B) Normal Children (N = 18)

	HV1	HV2	HV3	HV4	HV5	SV1	SV2	SV3	SV4	SV5
HV1		.29	.77**	.38	.39	.11	-.04	-.07	-.05	-.11
HV2			.59**	.32	.44	.04	-.13	.17	.28	-.14
HV3				.55*	.56*	.12	-.16	.03	.21	-.27
HV4					.56*	.33	-.08	.22	.49*	-.02
HV5						.23	-.04	.33	.54*	-.19
SV1							.54*	.79**	.09	.05
SV2								.49*	.05	-.04
SV3									.35	.18
SV4										.41

\* P&lt;0.05 (Two-tail)

\*\* P&lt;0.01 (Two-tail)

## APPENDIX 5.3

PEARSON CORRELATION CO-EFFICIENT: CHILD NON-VERBAL BEHAVIOUR AT HOME  
AND AT SCHOOL

A) ESN (M) Children (N = 19)

	CN1	CN2	CN3	CN4	CN5	NC1	NC2	NC3	NC4	NC5
CN1		.15	-.01	-.13	-.11	-.07	.27	.15	.02	-.22
CN2			-.17	-.29	-.18	-.16	.55*	.01	-.04	-.14
CN3				.57*	.17	.38	.01	.11	-.02	.31
CN4					-.05	.26	-.32	.02	.04	.42
CN5						.01	.03	.37	-.27	.05
NC1							-.20	-.21	.04	.26
NC2								.07	-.01	-.24
NC3									-.02	-.19
NC4										-.35

B) Normal Children (N = 18)

	CN1	CN2	CN3	CN4	CN5	NC1	NC2	NC3	NC4	NC5
CN1		-.15	-.02	.00	.30	-	.07	.36	-.09	.02
CN2			.17	.25	.07	-	-.23	-.02	-.23	.12
CN3				.21	.02	-	.01	.02	-.08	-.36
CN4					-.21	-	-.26	-.06	.41	-.26
CN5						-	.26	-.03	-.26	.19
NC1										
NC2								-.17	.32	-.27
NC3									-.42	.02
NC4										-.53*

\* P&lt;0.05 (Two-tail)

\* P&lt;0.01 (Two-tail)

(No Child Non-Verbal Control observed in school)

## APPENDIX 5.4

PEARSON CORRELATION CO-EFFICIENT: ADULT NON-VERBAL BEHAVIOUR AT HOME  
AND AT SCHOOL

A) ESN (M) Children (N = 19)

	HN1	HN2	HN3	HN4	HN5	SN1	SN2	SN3	SN4	SN5
HN1		-.13	.55	-.15	.49*	.04	-.20	.13	.31	-.18
HN2			.02	.10	-.00	-.23	-.07	-.18	-.23	.09
HN3				.27	.50*	.00	-.18	-.17	.17	-.19
HN4					.38	.33	.09	-.07	.28	.18
HN5						.62**	.13	.18	.62**	.22
SN1							.34	.46*	.59**	.53*
SN2								.24	.29	.17
SN3									.56*	.55*
SN4										.44

B) Normal Children (N = 18)

	HN1	HN2	HN3	HN4	HN5	SN1	SN2	SN3	SN4	SN5
HN1		.23	-.15	.60**	-.00	.44	-.32	-.03	-.39	.16
HN2			.26	.18	.14	-.08	-.02	-.14	-.17	-.16
HN3				-.09	.29	-.22	-.23	-.43	.23	-.19
HN4					-.19	.23	-.24	-.21	.17	.13
HN5						.15	-.36	-.33	.11	.30
SN1							-.29	.09	-.09	.69**
SN2								.19	-.03	-.34
SN3									-.28	-.18
SN4										.28

\* P&lt;0.05 (Two-tail)

\* P&lt;0.01 (Two-tail)

## APPENDIX 5.5

PEARSON CORRELATION CO-EFFICIENT: ADULT AND CHILD VERBAL  
BEHAVIOUR AT HOME AND AT SCHOOL

<u>ADULT VERBAL BEHAVIOUR</u>	<u>CHILD VERBAL BEHAVIOUR</u>									
	<u>ESN (M) (N = 19)</u>					<u>Normal (N = 18)</u>				
	CV1	CV2	CV3	CV4	CV5	CV1	CV2	CV3	CV4	CV5
<u>Home</u>										
HV1	.43	.62**	.62**	.39	.68**	.10	.50*	.34	.73**	.32
HV2	.42	.03	.70**	.38	.28	.23	.83**	.44	.60**	.34
HV3	.04	.36	.51*	.61**	.39	.22	.66**	.57*	.94**	.33
HV4	.40	.52*	.57*	.54	.57*	-.02	.44	.85**	.51*	.48*
HV5	.28	.68**	.72**	.23	.75**	.58*	.72**	.78**	.71**	.75**
	VC1	VC2	VC3	VC4	VC5	VC1	VC2	VC3	VC4	VC5
<u>School</u>										
SV1	.51*	.60**	.51*	.69**	.80**	-	.03	-.03	.46	-.05
SV2	.43	.53*	.60**	.81**	.29	-	-.09	-.25	.11	-.06
SV3	.62**	.64**	.75**	.89**	.61**	-	.12	.16	.63**	.05
SV4	.87**	.78**	.79**	.74**	.52*	-	.32	.62**	.66**	.34
SV5	.73**	.54*	.61**	.75**	.69**	-	.43	.63**	.68*	.61**

\* P&lt;0.05 (Two-tailed)

\*\* P&lt;0.01 (Two-tailed)

(No Child Verbal Control observed for normal children at School)

## APPENDIX 5.6

PEARSON CORRELATION CO-EFFICIENT: ADULT VERBAL AND CHILD NON-VERBAL  
BEHAVIOUR AT HOME AND AT SCHOOL

<u>ADULT VERBAL BEHAVIOUR</u>	<u>CHILD NON-VERBAL BEHAVIOUR</u>									
	<u>ESN (M) (N = 19)</u>					<u>Normal (N = 18)</u>				
	CN1	CN2	CN3	CN4	HN5	CN1	CN2	CN3	CN4	CN5
<u>Home</u>										
HV1	.18	-.06	-.21	.21	.32	.08	.24	.32	.84**	-.03
HV2	.06	.29	-.18	-.06	.01	-.12	.68**	.05	.25	.03
HV3	-.17	-.23	.08	.08	.18	-.08	.41	.37	.65	.03
HV4	.35	-.05	-.05	-.04	.15	.10	.10	.42	.34	-.28
HV5	.29	-.18	-.15	-.03	.35	.14	.36	.58*	.08	.26
	NC1	NC2	NC3	NC4	NC5	NC1	NC2	NC3	NC4	NC5
<u>School</u>										
SV1	-.17	-.14	.23	-.29	-.15	-	-.00	.53*	-.10	-.26
SV2	-.15	.33	.11	-.02	-.56*	-	.04	.40	-.10	-.44
SV3	.02	.25	.14	.09	-.47*	-	-.14	.50*	-.24	-.23
SV4	-.06	.04	-.16	-.06	-.34	-	-.03	.06	-.50	-.00
SV5	.04	.27	.25	-.08	-.33	-	-.09	.10	-.25	.29

\* P&lt;0.05 (Two-tailed)

\*\* P&lt;0.01 (Two-tailed)

(No Child Non-Verbal Control observed for normal children in school)

## APPENDIX 5.7

PEARSON CORRELATION CO-EFFICIENT: ADULT NON-VERBAL AND CHILD VERBAL  
BEHAVIOUR AT HOME AND AT SCHOOL

<u>ADULT NON-VERBAL BEHAVIOUR</u>	<u>CHILD VERBAL BEHAVIOUR</u>									
	ESN (M) (N = 19)					Normal (N = 18)				
	CV1	CV2	CV3	CV4	CV5	CV1	CV2	CV3	CV4	CV5
<u>Home</u>										
HN1	.24	.07	.38	.06	.46*	.38	.46	.32	.40	.54*
HN2	.23	.37	.00	.17	.14	.20	.78**	.22	.53	.28
HN3	.21	-.05	.31	.38	.26	-.10	.04	-.28	-.21	-.29
HN4	.48*	.43	.33	.27	.10	.42	.16	.18	.22	.31
HN5	.14	.17	.17	.06	-.01	.03	.18	.25	-.04	.18
	SV1	SV2	SV3	SV4	SV5	SV1	SV2	SV3	SV4	SV5
<u>School</u>										
SN1	.48*	.61**	.55*	.63*	.24	-	-.25	-.12	.40	-.12
SN2	.26	.26	.22	.34	.41	-	.33	-.01	-.25	-.10
SN3	.42	.59**	.67**	.39	.23	-	-.14	-.14	-.36	.04
SN4	.28	.28	.59**	.45*	.23	-	.59**	.57*	.63**	.17
SN5	.32	.46*	.57**	.39	.11	-	.23	.45	.78**	.19

\* P&lt;0.05 (Two-tailed)

\*\* P&lt;0.01 (Two-tailed)

(No Child Verbal Control observed at school for normal children)



## APPENDIX 5.8

PEARSON CORRELATION CO-EFFICIENT: ADULT AND CHILD NON-VERBAL  
BEHAVIOUR AT HOME AND AT SCHOOL

<u>ADULT NON-VERBAL BEHAVIOUR</u>	<u>CHILD NON-VERBAL BEHAVIOUR</u>									
	<u>ESN (M) (N = 19)</u>					<u>Normal (N = 18)</u>				
	CN1	CN2	CN3	CN4	CN5	CN1	CN2	CN3	CN4	CN5
<u>Home</u>										
HN1	.17	-.25	.22	.03	.77**	.05	.14	.30	.48*	.26
HN2	.17	.89**	-.23	-.19	-.11	-.02	.63**	.04	.39	.15
HN3	-.01	-.15	.26	.07	.68**	-.17	.41	-.20	-.24	-.10
HN4	.33	-.01	-.16	-.16	-.03	.10	-.11	.47*	.41	.39
HN5	.28	.05	.17	-.43	.38	.22	.44	.05	-.05	.13
	NC1	NC2	NC3	NC4	NC5	NC1	NC2	NC3	NC4	NC5
<u>School</u>										
SN1	-.16	.21	-.06	.10	-.33	-	-.30	.61	-.26	-.10
SN2	-.05	-.45	-.10	.15	-.14	-	.53	-.30	.28	.05
SN3	.04	.22	-.08	.23	-.51*	-	-.12	.11	.02	.09
SN4	.02	.02	.05	.17	-.57**	-	.33	.24	-.05	-.05
SN5	.43	.27	-.09	.12	-.30	-	-.09	.64**	-.41	.09

\* P&lt;0.05 (Two-tailed)

\*\* P&lt;0.01 (Two-tailed)

(No Child Non-Verbal Control observed in school for normal children)

## APPENDIX 5.9

PEARSON CORRELATION CO-EFFICIENT: CHILD VERBAL AND NON-VERBAL  
BEHAVIOUR AT HOME AND AT SCHOOL

CHILD VERBAL BEHAVIOUR	CHILD NON-VERBAL BEHAVIOUR									
	ESN (M) (N = 19)					Normal (N = 18)				
	CN1	CN2	CN3	CN4	CN5	CN1	CN2	CN3	CN4	SN5
<u>Home</u>										
CV1	.47	.03	-.14	-.02	.18	.04	.21	.28	-.15	.85**
CV2	.19	.28	-.27	-.22	.03	.10	.71**	.38	.35	.16
CV3	-.08	-.15	-.10	-.04	.27	.11	.24	.52	.21	.04
CV4	.35	.01	.16	.15	.04	-.01	.49*	.51*	.53*	.10
CV5	.29	-.08	-.30	-.00	.41	.45	.20	.47	.22	.23
	NC1	NC2	NC3	NC4	NC5	NC1	NC2	NC3	NC4	NC5
<u>School</u>										
VC1	-.06	.23	-.07	-.08	-.21	-	-	-	-	-
VC2	-.14	.19	-.17	-.04	-.18	-	.59**	-.10	.02	.09
VC3	.06	.16	.06	.11	-.55*	-	.20	.08	-.50*	.43
VC4	-.11	.21	.17	.00	-.59	-	-.01	.38	-.37	-.01
VC5	-.01	-.09	.19	-.14	.05	-	-.22	-.05	-.42	.45

\* P&lt;0.05 (Two-tailed)

\*\* P&lt;0.01 (Two-tailed)

(No Child Verbal or Non-Verbal Control observed for normal children in school.)

## APPENDIX 5.10

PEARSON CORRELATION CO-EFFICIENT: ADULT VERBAL AND NON-VERBAL  
BEHAVIOUR AT HOME AND AT SCHOOL

VERBAL BEHAVIOUR	ESN(M) (N=19)					NON -VERBAL BEHAVIOUR Normal (N=18)				
	HN1	HN2	HN3	HN4	HN5	HN1	HN2	HN3	HN4	HN5
Home										
HV1	.24	.19	.37	.39	-.05	.48*	.35	-.42	.28	-.15
HV2	-.02	.45	.05	.37	-.11	.12	.88**	.19	-.08	.13
HV3	.03	-.17	.17	.02	-.21	.40	.52*	-.28	-.16	-.04
HV4	.29	.17	.35	.71**	.36	.20	.10	-.31	.14	-.02
HV5	.57*	-.02	.20	.09	.17	.51*	.25	-.26	.17	.07
School										
SV1	.45	.51*	.22	.33	.11	.73**	-.38	-.21	.03	.71**
SV2	.81**	.22	.61**	.51*	.59**	.51*	-.04	.29	-.15	.23
SV3	.60**	.35	.61**	.38	.51*	.50*	-.32	-.37	.21	.68**
SV4	.42	.30	.41	.25	.30	.18	-.11	-.31	.21	.52*
SV5	.55*	.20	.34	.54*	.31	.24	.13	.07	.57*	.45

\* P&lt;0.05 (Two-tailed)

\*\* P&lt;0.01 (Two-tailed)

ASSESSMENTS OF NORMAL CHILDREN'S TIDINESS BY MOTHERS AND TEACHERS

MOTHERS' RATING	TEACHERS' RATING					TOTAL
	Always	Nearly Always	Sometimes	Quite a lot	A lot	
Always	1	2	0	0	0	3
Nearly Always	3	1	1	0	0	5
Sometimes	2	2	1	0	0	5
Quite a lot	1	1	1	0	0	3
A lot	0	1	1	0	0	2
TOTAL	7	7	4	0	0	18

Tau C = 0.26 NS  
 Wilcoxon: Z = -2.56 (P<0.01 one tail)

APPENDIX 6.02

AMOUNT OF REMINDING CHILDREN NEEDED TO KEEP TIDY

ESN (M) MOTHERS' RATING	TEACHERS' RATING					TOTAL
	None	A Little	Some	Quite A Lot	A Lot	
None	3	0	0	0	0	3
A Little	3	0	0	0	0	3
Some	1	2	1	0	0	4
Quite A Lot	0	1	1	0	0	2
A Lot	1	1	2	0	1	5
TOTAL	8	4	4	0	1	17

Tau = .59 (P<0.01)  
 Wilcoxon: Z = -3.06 (P<0.01 one tail)

NORMAL						
None	0	0	0	0	0	0
A Little	6	1	1	0	0	8
Some	4	0	0	0	0	4
Quite A Lot	1	0	0	0	0	1
A Lot	3	2	0	0	0	5
TOTAL	14	3	1	0	0	18

Tau = 0.12 N.S.  
 Wilcoxon: Z = -3.53 (P<0.01 one tail)

## ASSESSMENTS OF CHILDREN'S ABILITY TO UNDERSTAND/HANDLE CASH

A) MOTHERS							
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL NUMBER	MEAN SCORE
	V.Good	Good	Fair	Poor	V.Poor		
ESN (M)	6	4	2	4	3	19	2.68
Normal	16	2	0	0	0	18	1.11
TOTAL	22	6	2	4	3	37	
Tau: = -.63 P<0.01							
B) TEACHERS							
Handicapped	3	8	5	0	3	19	2.58
Normal	13	4	0	0	0	17	1.23
TOTAL	16	12	5	0	3	36	
Tau: = -.70 P<0.01							
C) CORRELATIONS AND COMPARISONS BETWEEN MOTHERS' AND TEACHER'S SCORES							
	<u>ESN (M) Children</u>			<u>Normal Children</u>			
Tau:	0.35 P<0.05			0.11 N.S.			
Wilcoxon:	-0.48 N.S.			-0.74 N.S.			

OCCURRENCE OF CHILDREN DOING THE SHOPPING ALONE

STATUS	Mothers' Replies		Teachers' Replies	
	Yes	No	Yes	No
ESN (M)	15	4	12	3
Normal	18	0	5	0
TOTAL	33	4	17	3
			Tau	P
Mothers of ESN (M) and normal children			-.21	<0.05
Teachers of ESN (M) and normal children			-.15	NS

## APPENDIX 6.05

CHILDRENS' ABILITY TO SHOP ALONE

A) MOTHERS							
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL	MEAN SCORE
	Weekend Shopping	2/3 Items without Instruct.	2/3 Items with Inst /1 Item	1 Item with Instruct.	Unable to cope		
ESN (M)	7	4	4	0	3	18	2.33
Normal	13	5	0	0	0	18	1.28
TOTAL	20	9	4	0	3	36	
Tau = -.44 P<0.01							
B) TEACHERS							
ESN (M)	6	3	5	2	1	17	2.35
Normal	14	3	1	0	0	18	1.28
TOTAL	20	6	6	2	1	35	
Tau = -.50 P<0.01							
C) <u>CORRELATIONS AND COMPARISONS BETWEEN MOTHERS' AND TEACHER'S SCORES</u>							
	<u>ESN (M) Children</u>			<u>Normal Children</u>			
Tau:	.30 N.S.			.43 P<0.01			
Wilcoxon:	-0.58 N.S.			0.00 N.S.			

## CHILDREN'S COMPETENCY IN PREPARING A LIGHT SNACK INVOLVING COOKING

A) MOTHERS							
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL	MEAN SCORE
	No Help	Occ. Verb. Reminder	Verbal Instruct.	Some Prac. Help	Considerable Help		
ESN (M)	9	2	3	3	0	17	2.00
Normal	17	0	0	0	0	17	1.00
TOTAL	26	2	3	3	0	34	
Tau = -0.47 P<0.01							
B) TEACHERS							
ESN (M)	4	7	3	2	2	18	2.50
Normal	8	6	2	0	0	16	1.63
TOTAL	12	13	5	2	2	34	
Tau = -0.40 P<0.05							
C) CORRELATIONS AND COMPARISONS BETWEEN MOTHERS' AND TEACHER'S SCORES							
	<u>ESN (M) Children</u>			<u>Normal Children</u>			
Tau:	-0.25	N.S.				N/A	
Wilcoxon:	-0.90	N.S.				-2.37	P<0.05

## APPENDIX 6.07

OCCURRENCE OF CHILDREN TRAVELLING FOR LONG DISTANCES ALONE  
(Mothers' Replies)

STATUS	Mothers' Replies	
	Yes	No
ESN (M)	4	15
Normal	11	7
TOTAL	15	22
Tau = -.40 P<0.01		

## APPENDIX 6.08

AMOUNT OF HELP NEEDED BY CHILDREN IN TRAVELLING FOR LONGER DISTANCES

A) MOTHERS							
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL	MEAN SCORE
	No Help at all	Collect or take to start	Collect and take to start	Has ticket bought	Cannot travel alone		
ESN (M)	3	1	0	1	7	12	3.67
Normal	11	0	0	0	0	11	1.00
TOTAL	14	1	0	1	7	23	
Tau = -.75 P<0.01							
B) TEACHERS							
ESN (M)	5	3	1	4	4	17	2.94
Normal	13	3	0	0	1	17	1.41
TOTAL	18	6	1	4	5	34	
Tau = -.54 P<0.01							
C) <u>CORRELATIONS AND COMPARISONS BETWEEN MOTHERS' AND TEACHER'S SCORES</u>							
	<u>ESN (M) Children</u>			<u>Normal Children</u>			
Tau:	0.35 N.S.			N.A.			
Wilcoxon:	z= -1.61 N.S.			-1.61 N.S.			



ASSESSMENTS OF HOW MUCH HELP CHILDREN NEED TO TRAVEL ALONE FOR SHORT DISTANCES

A) MOTHERS							
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL	MEAN SCORE
	No Help At all	Collect or take to start	Collect and take start	Has ticket bought	Cannot travel alone		
ESN (M)	11	0	1	1	3	16	2.06
Normal	18	0	0	0	0	18	1.00
TOTAL	29	0	1	1	3	34	
Tau = -.31 P<0.01							
B) TEACHERS							
ESN (M)	12	3	1	1	2	19	1.84
Normal	16	0	1	0	0	17	1.47
TOTAL	28	3	2	1	2	26	
tau = -.23 N.S.							
C) <u>CORRELATIONS AND COMPARISONS BETWEEN MOTHERS' AND TEACHER'S SCORES</u>							
		<u>ESN (M) Children</u>			<u>Normal Children</u>		
Tau:		0.29	P<0.05		N/A		
Wilcoxon:		z = -1.08	N.S.		-1.34	N.S.	

OCCURRENCE OF CHILDREN BELONGING TO A CLUB

STATUS	Mothers' Replies	
	Yes	No
ESN (M)	4	15
Normal	8	9
TOTAL	12	24
Tau = -.26 P<0.05		

APPENDIX 6.11

LENGTH OF TIME CHILDREN CAN BE LEFT ALONE

A) MOTHERS							
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL	MEAN SCORE
	2 + Hours	½-2 Hours	Under ½ Hour	Only few Minutes	Never		
ESN (M)	12	1	2	2	1	18	1.83
Normal	13	3	0	1	1	18	1.56
TOTAL	25	4	2	3	2	36	
Tau = -.08 N.S.							
B) TEACHERS							
ESN (M)	7	9	3	0	0	19	1.79
Normal	14	4	0	0	0	18	1.22
TOTAL	21	11	3	0	0	37	
Tau = -.44 P<0.01							
C) <u>CORRELATIONS AND COMPARISONS BETWEEN MOTHERS' AND TEACHER'S SCORES</u>							
	<u>ESN (M) Children</u>			<u>Normal Children</u>			
Tau:	.06	N.S.		.22	N.S.		
Wilcoxon:	-.08	N.S.		-1.15	N.S.		

CHILDREN'S ABILITY TO MAKE AND MAINTAIN FRIENDSHIPS

A) MOTHERS							
STATUS	RATING OF CHILDREN'S ABILITY TO KEEP AND MAINTAIN FRIENDSHIPS					TOTAL	MEAN SCORE
	V.Good	Good	Fair	Poor	V.Poor		
ESN (M)	2	4	4	4	3	17	3.12
Normal	10	4	3	0	1	18	1.78
TOTAL	12	8	7	4	4	35	
Tau = -.57 P<0.01							
B) TEACHERS							
ESN (M)	3	8	4	3	1	19	2.53
Normal	6	7	4	1	0	18	2.00
TOTAL	9	15	8	4	1	37	
Tau = -.26 N.S.							
C) <u>CORRELATIONS AND COMPARISONS BETWEEN MOTHERS' AND TEACHER'S SCORES</u>							
	<u>ESN (M) Children</u>			<u>Normal Children</u>			
Tau:		-.10	N.S.		.05	N.S.	
Wilcoxon:	Z =	-1.07	N.S.		-.84	N.S.	

## CHILDREN'S ABILITY TO GET ON WITH ADULTS THEY KNEW

ESN (M) MOTHERS' RATING	TEACHERS' RATING					TOTAL
	V.Good	Good	Fair	Poor Lot	V.Poor	
V.Good	4	6	0	0	0	10
Good	0	2	2	1	0	5
Fair	1	1	0	0	0	2
Poor	1	0	0	0	0	1
V.Poor	0	0	0	0	0	0
TOTAL	6	9	2	1	1	17
Tau = 0.24 N.S. Wilcoxon: Z = -1.08 N.S.						
NORMAL						
V.Good	6	4	1	0	0	11
Good	1	3	2	0	0	6
Fair	0	1	0	0	0	1
Poor	0	0	0	0	0	0
V.Poor	0	0	0	0	0	0
TOTAL	7	8	3	0	0	18
Tau = .31 P<0.05 Wilcoxon: Z = -1.60 N.S.						

## APPENDIX 6.14

## CHILDREN'S ABILITY TO GET ON WITH UNKNOWN ADULTS

ESN (M) MOTHERS' RATING	TEACHERS' RATING					TOTAL
	V.Good	Good	Fair	Poor	V.Poor	
V.Good	2	1	2	0	0	5
Good	0	4	1	0	0	5
Fair	0	1	2	0	0	3
Poor	0	0	1	0	0	1
V.Poor	0	1	0	1	0	2
TOTAL	2	7	6	1	0	16
Tau = .35 (P<0.05) Wilcoxon: Z = .14 N.S.						
NORMAL						
V.Good	1	5	1	0	0	7
Good	1	6	0	0	0	7
Fair	0	0	3	0	0	3
Poor	0	0	0	0	0	0
A Lot	1	0	0	0	0	1
TOTAL	3	11	4	0	0	18
Tau = .17 N.S. Wilcoxon: Z = -.91 N.S.						

## APPENDIX 6.15

TEACHERS' RATINGS OF CHILDREN'S ABILITY TO GET ON WITH CHILDREN  
THEY DO NOT KNOW

STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL	MEAN SCORE
	V.Good	Good	Fair	Poor	V.Poor		
ESN (M)	0	5	11	3	0	19	2.89
Normal	2	9	3	1	0	15	2.20
TOTAL	2	14	14	4	0	34	
Tau = -.49 P<0.01							

## APPENDIX 6.16

## OCCURRENCE OF CHILDREN HAVING CONTACT WITH ANIMALS AT HOME AND SCHOOL

STATUS	OCCURRENCE			
	Mothers' Replies		Teachers' Replies	
	Yes	No	Yes	No
ESN (M)	7	12	7	11
Normal	10	8	1	15
TOTAL	17	20	8	26
			Tau	P
Mothers of ESN (M) and normal children			-.14	N.S.
Teachers of ESN (M) and normal children			.33	P<0.01
Mothers and teachers of ESN (M) children			.11	N.S.
Mothers and teachers of normal children			-.16	N.S.

## APPENDIX 6.17

## OCCURRENCE OF CHILDREN HAVING BOY/GIRLFRIEND

STATUS	OCCURRENCE			
	Mothers' Replies		Teachers' Replies	
	Yes	No	Yes	No
ESN (M)	3	16	2	15
Normal	6	11	2	13
TOTAL	9	27	4	28
			Tau	P
Mothers of ESN (M) and normal children			-.19	N.S.
Teachers of ESN (M) and normal children			-.02	N.S.
Mothers and teachers of ESN (M) children			-.08	N.S.
Mothers and teachers of normal children			.45	P<0.01

CHILDREN'S UNDERSTANDING OF SEX

A) MOTHERS							
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL	MEAN SCORE
	V.Good	Good	Fair	Poor	V.Poor		
ESN (M)	3	3	7	2	2	17	2.54
Normal	6	7	2	1	1	17	2.15
TOTAL	9	10	9	3	3	34	
Tau = -.38 P<0.05							
B) TEACHERS							
ESN (M)	0	1	8	3	3	15	3.54
Normal	2	4	7	0	0	13	2.38
TOTAL	2	5	15	3	3	28	
Tau = -.62 P<0.01							
C) <u>CORRELATIONS AND COMPARISONS BETWEEN MOTHERS' AND TEACHER'S SCORES</u>							
	<u>ESN (M) Children</u>			<u>Normal Children</u>			
Tau:	.39	P<0.05		.21	N.S.		
Wilcoxon:	-2.67	P<0.01		-.49	N.S.		



## FREQUENCY OF CHILDREN'S INTERRUPTING

ESN (M) MOTHERS' RATING	TEACHERS' RATING					TOTAL
	Never	Rarely	Sometimes	Frequent	V.Often	
Never	2	4	1	1	0	8
Rarely	0	0	1	1	0	2
Sometimes	0	0	3	0	0	3
Frequently	0	0	0	0	1	1
V.Often	0	0	3	2	0	5
TOTAL	2	4	8	4	1	19
Tau = .46 P<0.01 Wilcoxon: Z = -.66 N.S.						
NORMAL						
Never	1	1	2	0	0	4
Rarely	1	0	0	2	0	3
Sometimes	0	0	1	1	0	2
Frequently	1	6	0	1	0	8
V.Often	1	0	0	0	0	1
TOTAL	4	7	3	4	0	18
Tau = -.23 N.S. Wilcoxon: Z = -1.25 N.S.						

## APPENDIX 6.20

RATINGS OF ESN (M) CHILDREN'S SENSITIVITY OF OTHER PEOPLE'S FEELINGS  
TOWARDS THEMSELVES

ESN (M) MOTHERS' RATING	TEACHERS' RATING					TOTAL
	V.Good	Good	Fair	Poor	V.Poor	
Very Good	2	9	0	1	0	12
Good	0	4	2	0	0	6
Fair	0	0	0	1	0	1
Poor	0	0	0	0	0	0
Very Poor	0	0	0	0	0	0
TOTAL	2	13	2	2	0	19

Tau = .34 P<0.05  
Wilcoxon: Z = -3.18 P<0.01 (one tail)

## APPENDIX 6.21

## CHILDREN'S ACCURACY IN JUDGING OTHERS' FEELINGS TOWARDS THEMSELVES

ESN (M) MOTHERS' RATING	TEACHERS' RATING					TOTAL
	V.Good	Good	Fair	Poor	V.Poor	
Very Good	0	3	1	0	0	4
Good	0	2	4	0	0	6
Fair	0	1	2	1	0	4
Poor	0	0	1	0	0	1
Very Poor	0	0	1	0	0	1
TOTAL	0	6	9	1	0	16
Tau = .41 P<0.05 Wilcoxon: Z = -1.29 N.S.						
NORMAL						
Very Good	2	0	0	0	0	2
Good	0	0	3	1	0	4
Fair	0	4	1	0	0	5
Poor	0	2	0	0	0	2
Very Poor	0	0	1	0	0	1
TOTAL	2	6	5	1	0	14
Tau = 0.03 N.S. Wilcoxon: Z = -1.02 N.S.						

## APPENDIX 6.22

## CHILDREN'S ABILITY TO WORK OUT MINOR PRACTICAL PROBLEMS FOR THEMSELVES

A) MOTHERS							
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL	MEAN SCORE
	No Help at all	V.Little Help	Some Help occasionally	Considerable help often	Cannot cope with no help		
ESN (M)	4	6	4	4	1	19	2.58
Normal	7	6	1	3	1	18	2.17
TOTAL	11	12	5	7	2	37	
Tau = -.21 N.S.							
B) TEACHERS							
ESN (M)	7	1	7	3	1	19	2.47
Normal	11	4	2	1	0	18	1.61
TOTAL	18	5	9	4	1	37	
Tau = -.37 P<0.05							
C) <u>CORRELATIONS AND COMPARISONS BETWEEN MOTHERS' AND TEACHER'S SCORES</u>							
	<u>ESN (M) Children</u>			<u>Normal Children</u>			
Tau:	.21 N.S.			.28 N.S.			
Wilcoxon:	Z = -0.35 N.S.			-1.51 N.S.			

## CHILDREN'S BEHAVIOUR IN THE FACE OF FAILURE

A) MOTHERS							
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE						TOTAL
	Loses Temper	Sulks	Needs Encouragement	Becomes Anxious	Appears to Ignore	Tries Again	
ESN (M)	6	1	1	6	1	4	19
Normal	9	0	2	2	1	4	18
TOTAL	15	1	3	8	2	8	37
B) TEACHERS							
ESN (M)	1	3	6	3	2	4	19
Normal	1	1	9	0	1	5	17
TOTAL	2	4	15	3	3	9	36

## APPENDIX 6.24

## CHILDREN'S ABILITY TO COPE WITH DISAPPOINTMENT

ESN (M) MOTHERS' RATING	TEACHERS' RATING					TOTAL
	V.Good	Good	Fair	Poor Lot	V.Poor	
V.Good	1	1	2	0	0	4
Good	0	0	4	2	0	6
Fair	0	1	1	0	0	2
Poor	0	2	0	1	0	3
V.Poor	0	1	2	1	0	4
TOTAL	1	5	9	4	0	19
Tau = .07 N.S. Wilcoxon: Z = -.10 N.S.						
NORMAL						
V.Good	2	1	0	0	0	3
Good	3	2	0	0	0	5
Fair	1	0	1	0	0	2
Poor	0	4	0	0	0	4
V.Poor	0	1	1	0	0	2
TOTAL	6	8	2	0	0	16
Tau = 0.52 P<0.01 Wilcoxon: Z = -2.71 P<0.01 one tail)						

## APPENDIX 6.25

## MOTHERS'S RATING OF CHILDREN'S ABILITY TO COPE WITH CRITICISM OR REPROOF

STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL	MEAN SCORE
	V.Good	Good	Fair	Poor	V.Poor		
ESN (M)	1	3	8	2	5	19	3.37
Normal	2	8	2	5	1	18	2.72
TOTAL	3	11	10	7	6	37	
Tau = -.31 P<0.05							

CHILDREN'S BEHAVIOUR WHEN THEY DID NOT COPE WELL WITH CRITICISM

A) MOTHERS						
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL
	Loses Temper	Sulks	Anxious and Cries	Withdraws	Ignores Criticism	
ESN (M)	4	6	2	2	1	15
Normal	4	3	0	2	0	9
TOTAL	8	9	2	4	1	24
B) TEACHERS						
ESN (M)	1	6	0	1	0	8
Normal	2	2	0	2	0	6
TOTAL	3	8	0	3	0	14

## ASSESSMENTS OF CHILDREN RESPONSE TO DOING AS THEY ARE ASKED

A) MOTHERS							
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL	MEAN SCORE
	Always	Generally	Sometimes	Rarely	Never		
ESN (M)	6	6	5	1	1	19	2.21
Normal	5	8	5	0	0	18	2.00
TOTAL	11	14	10	1	1	37	
Tau = -.07 N.S.							
B) TEACHERS							
ESN (M)	7	8	3	1	0	19	1.89
Normal	11	7	0	0	0	18	1.39
TOTAL	18	15	3	1	0	37	
Tau = -.32 P<0.05							
C) <u>CORRELATIONS AND COMPARISONS BETWEEN MOTHERS' AND TEACHER'S SCORES</u>							
	<u>ESN (M) Children</u>			<u>Normal Children</u>			
Tau:	.28	N.S.		.32	N.S.		
Wilcoxon:	-1.22	N.S.		-2.49	P<0.01	one tail	



## CHILDREN'S ABILITY TO COPE WHEN SEPARATED ON AN OUTING

A) MOTHERS							
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL	MEAN SCORE
	V.Good	Good	Fair	Poor	V.Poor		
ESN (M)	8	3	2	3	3	19	2.47
Normal	10	4	2	2	0	18	1.78
TOTAL	18	7	4	5	3	37	
Tau = -.24 N.S.							
B) TEACHERS							
ESN (M)	0	9	6	2	2	19	2.84
Normal	3	10	1	3	0	17	2.24
TOTAL	3	19	7	5	2	36	
Tau = -.35 P<0.05							
C) CORRELATIONS AND COMPARISONS BETWEEN MOTHERS' AND TEACHER'S SCORES							
	<u>ESN (M) Children</u>			<u>Normal Children</u>			
Tau:	.22	N.S.		.04	N.S.		
Wilcoxon:	-.66	N.S.		-1.18	N.S.		

## CHILDREN'S ABILITY TO COPE WITH A MINOR INCIDENT

ESN (M) MOTHERS' RATING	TEACHERS' RATING					TOTAL
	V. Good	Good	Fair	Poor Lot	V. Poor	
V. Good	1	6	1	0	0	8
Good	1	0	3	1	0	5
Fair	0	1	1	0	1	3
Poor	0	0	0	0	0	0
V. Poor	0	1	1	1	0	3
TOTAL	2	8	6	2	1	19
Tau = .40 P<0.05 Wilcoxon: Z = -1.21 N.S.						
NORMAL						
V. Good	1	7	2	0	0	10
Good	0	1	0	1	0	2
Fair	0	1	0	0	0	1
Poor	0	2	1	0	0	3
V. Poor	1	0	0	0	0	1
TOTAL	2	11	3	1	0	17
Tau = -.03 N.S. Wilcoxon: Z = -.63 N.S.						

## APPENDIX 6.30

## OCCURRENCE OF CHILDREN FOLLOWING DAILY NEWS

STATUS	Mothers' Replies		Teachers' Replies	
	Yes	No	Yes	No
ESN (M)	15	4	11	7
Normal	16	2	14	1
TOTAL	21	6	25	8
			Tau	P
Mothers of ESN (M) and normal children			-.10	N.S.
Teachers of ESN (M) and normal children			-.32	<0.05
Mothers and teachers of ESN (M) children			.32	N.S.
Mothers and teachers of normal children			-.02	N.S.

## APPENDIX 6.31

## CHILDREN'S ABILITY TO CONCENTRATE ON A TASK

ESN (M)	TEACHERS' RATING					TOTAL
	V. Good	Good	Fair	Poor Lot	V. Poor	
MOTHERS' RATING						
V. Good	1	1	1	0	0	3
Good	1	3	3	0	0	7
Fair	0	2	2	1	0	5
Poor	0	0	1	1	0	2
V. Poor	0	0	1	1	0	2
TOTAL	2	6	8	3	0	19
Tau = .47 P<0.01 Wilcoxon: Z = N.S.						
NORMAL						
V. Good	4	1	0	0	0	5
Good	1	3	1	0	0	5
Fair	1	3	2	0	0	6
Poor	0	1	0	0	0	1
V. Poor	0	0	0	1	0	1
TOTAL	6	8	3	1	0	18
Tau = .50 P<0.01 Wilcoxon: Z = -1.72 N.S.						

## APPENDIX 6.32

## ESN (M) CHILDREN'S ABILITY TO ORGANISE THEMSELVES TO COMPLETE A TASK

ESN (M) MOTHERS' RATING	TEACHERS' RATING					TOTAL
	V.Good	Good	Fair	Poor	V.Poor	
Very Good	1	4	1	0	0	6
Good	2	1	3	0	1	7
Fair	0	0	2	1	0	3
Poor	0	0	1	0	0	1
Very Poor	0	0	1	1	0	2
TOTAL	3	5	8	2	1	19
Tau = .43 P<0.01 Wilcoxon: Z = N.S.						

## APPENDIX 6.33

## REASONS GIVEN FOR LACK OF DISCUSSION ABOUT THE FUTURE

A) MOTHERS						
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL
	Handicap	Normal for age	Home	Social	Personality	
ESN (M)	2	3	0	0	1	6
Normal	0	4	1	0	0	5
TOTAL	2	7	1	0	1	11
B) TEACHERS						
STATUS	Handicap	Normal for age	School	Social	Personality	TOTAL
	Handicap	Normal for age	School	Social	Personality	
ESN (M)	8	3	0	0	0	11
Normal	0	2	8	1	2	13
TOTAL	8	5	8	1	2	24

APPENDIX 6.34CHILDREN'S ASPIRATIONS FOR FUTURE EMPLOYMENT EXPRESSED AS S.E.S.

A) MOTHERS						
STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL
	SES 1	SES 2	SES 3NM	SES 3M	SES 4	
ESN (M)	1	3	2	6	0	14
Normal	0	6	1	1	2	10
TOTAL	1	9	3	7	2	24
B) TEACHERS						
ESN (M)	0	1	1	5	0	7
Normal	0	3	0	0	1	4
TOTAL	0	4	1	5	1	11

APPENDIX 6.35MOTHER'S ASSESSMENTS OF THE REALISM OF CHILDREN'S ASPIRATIONS FOR THE FUTURE

STATUS	NUMBER OF CHILDREN ALLOTTED TO EACH SCORE					TOTAL
	Very Realistic	Quite Realistic	Possibly Realistic	Not very Realistic	Totally Unrealis.	
ESN (M)	1	2	3	3	3	12
Normal	5	3	1	2	0	11
TOTAL	6	5	4	5	3	23
Tau = -.57 P<0.01						

## APPENDIX 6.36

## EFFECTS OF CHILD'S SEX ON MOTHER'S AND ASSESSMENTS

Q.No	QUESTIONS	PREDICTION (more able more oport)	ESN (M) (N)	NORMAL (N)
			Tau	Tau
2c	Washing self	Girls	.19	-.09
3c	Tidying without reminding	Girls	-.14	.23
9a	Frequency of helping gen.	Girls	.10	.41 *
9c	Competency at helping	Girls	0	.21
10a	Frequency making own bed	Girls	-.07	.25
10c	Competency making bed	Girls	-.39	-.20
11a	Frequency making drink	Girls	-.05	.19
11c	Help needed to make drink	Girls	0	.14
12a	Frequency cooking snack	Girls	.11	.39
12c	Help needed to cook	Girls	-.31	N/A
16a	Travel short distances	Boys	.14	-.09
16c	Competency to travel	Boys	N/A	N/A
17a	Travel longer distances	Boys	-.23	-.16
17c	Comptency to travel	Boys	-.02	N/A
18c	Concern about child's key	Boys	-.14	.05
19a	Going out without mother	Boys	.14	-.21
20a	Going out alone(evening)	Boys	-.12	-.24
21a	Out with friends(evening)	Boys	-.04	-.25
22a	Belonging to a club	Boys	-.02	-.17
27a	Play alone away from home	Boys	-.04	-.20
28a	Having close friend	Girls	.15	-.12
29a	Having acquaintances	Boys	.23	.14
35a	Interest in opposite sex	Girls	-.14	-.02
36a	Having girl/boyfriend	Girls	-.12	.02
37a	Going out with girl/boyfr	Girls	-.19	-.27
37c	Ma.s' concern re dating	Girls	N/A	-.25
45c	Dealing with prac.probs.	Girls	.55	-.04
61e	Plans for future	Differ	.08	-.16

KEY: \* Significant at P<0.05 or P<0.01

## EFFECTS OF CHILD'S SEX ON TEACHER'S AND ASSESSMENTS

Q.No	QUESTIONS	PREDICTION (More able/ more opport)	ESN (M) (N)	NORMAL (N)
			Tau	Tau
3c	Need of reminding to wash	Girls	-.12	.28
11c	Help needed to make drink	Girls	.10	.05
12c	Help needed to cook snack	Girls	.55 *	.38
16a	Travel for short distance	Boys	.22	N/A
16c	Competency to travel	Boys	N/A	N/A
17a	Travel longer distances	Boys	-.04	N/A
17c	Competency to travel	Boys	.18	.05
28a	Having close friend	Girls	.04	.42 *
29a	Having acquaintances	Boys	.01	.27
35a	Interest in opposite sex	Girls	.10	-.26
36a	Having girl/boyfriend	Girls	.22	.21
45c	Dealing with prac.probs.	Girls	0	.20

KEY: \* Significant at  $P < 0.05$  or  $P < 0.01$   
N/A Statistics not available

## EFFECTS OF CHILD'S AGE ON MOTHER'S AND ASSESSMENTS

Q.No	QUESTIONS	PREDICTION (more able/ more oport)	ESN (M) (N)	NORMAL (N)
			Tau	Tau
4c	Spending p.money sensibly	Older	-.09	-.13
5a	Help given in spending	Older	.01	.40
5c	Ability to save & budget	Older	0	-.11
6c	Handling cash	Older	-.20	-.12
7c	Understand.value of money	Older	-.28	-.21
8c	Shopping without help	Older	-.11	-.09
9c	Competency in gen.helping	Older	-.19	.16
12c	Ability to cook snack	Older	-.21	N/A
16a	Travelling short distance	Older	.07	-.06
17a	Travelling longer dist.	Older	.02	.23
17c	Ability to travel	Older	-.22	N/A
18a	Having own door key	Older	-.47 *	-.14
19a	Going out without mother	Older	.27	.13
20a	Going out alone (evening)	Older	-.09	.30
22a	Belonging to a club	Younger	.23	.20
24a	Time left alone at home	Older	.15	-.11
24c	M.s' concern(child alone)	Older	-.14	-.17
27a	Play alone away from home	Older	-.38	.04
29c	Making & keeping friends	Older	-.12	.11
35a	Interest in opposite sex	Older	-.07	-.49 *
36a	Having boy/girlfriend	Older	-.08	-.52 *
37a	Dating	Older	-.14	-.04
38a	Knowledge of sex	Older	-.12	-.06
39a	Understanding sex	Older	-.29	-.22
40c	Interrupting	Younger	.12	-.09
41c	Sensitive of others opin.	Younger	.02	.02
42c	Judging others' opinion	Older	.37	.23
43c	Sensitivity to others	Older	-.04	.23
44c	Sharing and taking turns	Older	-.27	-.12
45c	Coping with prac. probs.	Older	-.04	.12
46c	Coping with: failure	Older	-.30	.07
47c	: not getting own way	Older	.11	-.07
48c	: disappointment	Older	.32	-.43 *
49c	: criticism/reproof	Older	-.08	.17
50d	Doing as asked	Younger	-.14	-.16
51c	Coping when separated	Older	-.38	.34
52c	Coping with minor incid.	Older	-.34	.11
53c	Coping with emergency	Older	N/A	-.44 N
57a	Following news	Older	-.02	.09
57c	Understanding news	Older	-.17	-.16
58c	Need of approval/praise	Older	-.06	-.12
59c	Ability to concentrate	Older	.18	.35
60c	Ability to organise self	Older	-.31	-.03
62c	Realism of plans	Older	-.11	.26

KEY: \* Significant at P<0.05 or P<0.01  
NA Statistics not available



## EFFECTS OF CHILD'S AGE ON TEACHER'S AND ASSESSMENTS

Q.No	QUESTIONS	PREDICTION (more able/ more opport)	ESN (M) (N)	NORMAL (N)
			Tau	Tau
6c	Ability to handle cash	Older	-.40	-.04
7c	Understand value of money	Older	0	.02
8c	How much shopping alone	Older	-.62 *	-.24
12c	Ability to cook snack	Older	-.23	-.18
16a	Travel for short distance	Older	-.08	N/A
17a	Travel for longer dist.	Older	-.14	N/A
17c	Competency to travel	Older	-.05	-.22
24a	Te.s worry of child alone	Younger	.02	-.05
29c	Making & keeping friends	Older	.28	.03
35a	Interest in opposite sex	Older	-.44 *	-.08
36a	Having boy/girlfriend	Older	.02	-.43 *
38a	Knowledge of sex	Older	-.33 *	N/A
38c	Understanding sex	Older	-.48 *	.17
40c	Interrupting	Younger	.23	-.07
41c	Sensitive of others' opin.	Younger	-.06	.13
42c	Accuracy of others' opin.	Older	.25	.11
43c	Sensitivity to others	Older	-.33	.05
44c	Taking turns & sharing	Older	-.02	-.10
45c	Coping with prac. probs.	Older	.13	-.25
46c	Coping with: Failure	Older	.27	-.11
47c	:Not getting own way	Older	.43	0
48c	:Disappointment	Older	.20	.03
49c	:Criticism/reproof	Older	.12	0
50d	Doing as asked	Younger	-.09	.01
51c	Coping when separated	Older	.11	-.02
52c	Coping with minor incid.	Older	-.13	.27
57a	Following news	Older	-.11	.20
57c	Understanding news	Older	.09	.53
58c	Need of approval/praise	Older	-.35	-.16
59c	Ability to concentrate	Older	.03	.26
60c	Ability to organise self	Older	-.11	.04
62c	Realism of plans	Older	.32 N/A	.89 N/A

KEY: \* Significant at P<0.05 or P<0.01  
N/A Statistics not available

## APPENDIX 6.40

## EFFECT OF CHILD'S S.E.C. ON MOTHERS' AND TEACHERS' ASSESSMENTS

Q.No	QUESTIONS	PREDICTION (More able/ more opport)	ESN (M) (N)	NORMAL (N)
			Tau	Tau
<u>MOTHERS</u>				
4a	Having pocket money	Differ	-.12	-.07
18a	Having door key	W/C	-.07	-.15
19a	Going out with mother	M/C	-.10	.36 *
20a	Going out alone (evening)	W/C	-.08	.49
21a	Going out with friends	W/C	-.14	.32
22a	Belonging to club	W/C	.24	.30
61a	Thoughts about future	Differ	.02	-.37 *
62c	Plans about future	Differ	-.42	.33
<u>TEACHERS</u>				
61a	Thoughts about future	Differ	-.02	.40
62c	Realism of plans	Differ	.49	N/A
<p><u>KEY:</u> * Significant at <math>P &lt; 0.05</math> N/A Statistics not available</p>				

## EFFECTS OF FAMILY SIZE ON MOTHERS' AND TEACHERS' ASSESSMENTS

Q.No	QUESTIONS	PREDICTION (More able/ more oppor)	ESN (M) (N)	NORMAL (N)
			Tau	Tau
<u>MOTHERS</u>				
9a	Helping about home gen.	3 plus	.03	.02
9c	Being more helpful	3 plus	0	.09
11a	Making hot drink	3 plus	.14	.03
12a	Cooking snack	3 plus	.18	-.14
14a	Having daily tasks	3 plus	.35	-.11
29c	Making and keeping friend	3 plus	-.08	-.40
30c	Getting on with kn.adults	Only	.04	-.14
32c	Getting on with kn.childs	3 plus	-.05	-.12
33c	Getting on with unkn. "	3 plus	.09	-.49
35a	Interest in opposite sex	3 plus	-.21	-.22
38a	Knowledge of sex	3 plus	.13	-.11
41c	Sensitive of others opin.	Only	-.37 *	-.32
44c	Taking turns and sharing	3 plus	-.12	-.40
47c	Coping with not having own way.	3 plus	-.06	-.30
<u>TEACHERS</u>				
29c	Making and keeping friend	3 plus	.20	.53 *
30c	Getting on with kn.adults	Only	-.13	.16
32c	Getting on with kn.childs	3 plus	.14	.29
33c	Getting on with unkn. "	3 plus	-.16	.05
35a	Interest in opposite sex	3 plus	.44 *	.30
38a	Knowledge of sex	3 plus	.02	N/A
41c	Sensitive of others opin.	Only	-.49 *	.04
44c	Taking turns and sharing	3 plus	-.18	.25
47c	Coping with not having own way	3 plus	-.12	.30
<p><u>KEY:</u> * Significant at P&lt;0.05 N/A Statistics not available</p>				