

IRISH FAMILIES UNDER STRESS

Vol. 2

An Epidemiological study of Psychological Adjustment,
Reading Attainment and Intelligence of 2029 ten and
eleven year old children in Dublin.

A Psychosocial study of 190 children
and their mothers.

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PREFACE

Michael Walsh

Programme Manager, Special Hospital Care Programme, Eastern Health Board

The Eastern Health Board has supported this research project, and the Board and its Management are very appreciative of the invaluable data produced in this work. On a personal basis I want to thank Drs. Jeffers and Fitzgerald for their initiative in this area, and hope that a follow-up study can be undertaken in the coming years.

This study of 2029 children in the Eastern Health Board gives us very important information on the psychological adjustment, reading attainment and intelligence.

The second part of the study, which examines maternal mental illness and formal child psychiatric illness, gives us even more important information, which increases our understanding of family and children.

Epidemiological research is a very important feature of service planning particularly in a period of restricted resources. In the area of Child Psychiatry continuous progress is being made, particularly in recent years with the total move of resources to the community and the extension of services to Kildare and Wicklow. A major feature of the Child Psychiatric Service is the involvement of the family as a unit.

One point emerging from this study is the great importance of social support from families; the extended family; the community in general, including professional and voluntary agencies, all of whom have an important role to play in supporting socially isolated families who are most at risk.

COMMENTARY

Dr. J.V. O.'Gorman,
Chief Executive, Health Research Board.

It is my pleasure to introduce Volume 2 of "Irish Families Under Stress" which describes the epidemiology of psychiatric problems in Irish children and their families. The work reported here was funded by the Health Research Board and is a further contribution by Dr. Michael Fitzgerald to an extensive array of epidemiological research in child psychiatry which he has undertaken personally and has stimulated younger colleagues to carry out. Dr. Fitzgerald is, unusually for a psychiatrist - child or adult - qualified in both psycho-analysis and in epidemiology. The present work reflects this background and is a most valuable contribution to our knowledge of the extent and character of psychiatric disorder in Irish school children and its associated familial psychopathology.

Such work is not merely of academic interest but has hard applicability to the planning and delivery of psychiatric services to a target population. Such endeavour is all the more valuable because of the dearth of scientific knowledge on the topic in Ireland. There have been several important studies in English speaking countries and these have been helpful in putting together the outline of service delivery programmes for child psychiatry in Ireland. However the distinctive cultural characteristics of our families make it imperative that we study our own problems for ourselves so that we can more efficiently plan for our own child psychiatric services.

Irish child psychiatric services are still in their infancy and there are many parts of this country which are not in receipt of locally based services. With the background information from studies such as this we are in a position rationally to plan and deliver services and avoid making the mistakes that the absence of such data would inevitably impose on us. We must therefore be thankful, not alone for Dr. Jeffers and Dr. Fitzgerald's work itself, but also for the stimulus which such endeavours inspire in the trainee child psychiatrist and others associated with the speciality, to undertake further research in the future.

23/4/91

SUMMARY OF STUDY AND MAIN FINDINGS.

SECTION ONE.

1.0 This study looks at the psychological adjustment in 10 and 11 year old children.

2.0 Reading Attainment and I.Q. are assessed.

3.0 Social environment, mothers' mental health and their social adjustment are assessed.

4.0 The study and results are reported in four sections: Section Two describes screening procedures and results; Section Three looks at the prevalence of child psychiatric disorder; Section Four describes the social environment of disordered children and Section Five is a study of Depression in Mothers.

SUMMARY SECTION TWO

- 2.0 2029 fourth class Primary School children were screened for Behavioural deviance, IQ, and Reading Attainment.
- 2.1 16.6% of 2029 children in an area of Dublin were found to be behaviourly deviant.
- 2.2 20% of boys and 11% of girls were deviant.
- 2.3 70% of those deviant were Conduct Disordered.
- 2.4 23.4% of those deviant were Emotionally Disordered.
- 2.5 6.6% of those deviant had a mixed Conduct and Emotional Disorder.
- 2.6 Children from 'socially disadvantaged' homes were more than twice as likely to be deviant than those from 'privileged' homes.
- 2.7 25% of children were reading 18 months behind their chronological age.
- 2.8 A high level of Intelligence Capacity was found with 15.5% of children performing above the 95th percentile. A possible explanation for this is discussed.
- 2.9 A significant association was found between behavioural deviance, IQ and Reading age.
- 2.10 Those children attending schools that catered for predominantly socially deprived children tended to score lower on reading and IQ tests.

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SUMMARY

SECTION THREE

- 3.0 190 children are examined intensively for psychological disorder.
- 3.1 104 children were 'non-deviant' on B2 Questionnaire and 86 were 'deviant' on B2. (Section 2)
- 3.2 62 of these children were found to have a definite psychiatric disorder. This showed the B2 has a 61.6% true positive rate and an 18.3% false negative rate.
- 3.3 Using the above figures the prevalence of Psychiatric Disorder for the total population is estimated to be 25.4%.
- 3.4 11.6% of the 190 children were enuretic, wetting the bed at least once a week.
- 3.5 10.0% of the 190 children had a conduct disorder.
- 3.6 4.7% of the 190 children had an emotional disorder.
- 3.7 4.2% of the 190 children had a mixed conduct and emotional disorder
- 3.8 2.1% of the 190 children were suffering from the Hyperkinetic Syndrome.

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SUMMARY SECTION FOUR

- 4.0 The Social and Family Circumstances of 190 Children are examined.
- 4.1 62 of the Children have a Psychiatric Disorder.
- 4.2 Child Psychiatric Disorder is associated with mothers social isolation.
- 4.3 Child Psychiatric Disorder is associated with Parental Disharmony.
- 4.4 Children whose mothers are depressed are more likely to be disordered.
- 4.5 Children from large families were twice as likely to be disordered as those from smaller families.
- 4.6 Children scoring poorly on tests of IQ and Reading Attainment are more vulnerable to environmental effects.

SUMMARY SECTION FIVE

- 5.0 185 mothers are assessed for Psychiatric Disorder.
- 5.1 Their material circumstances and social and family environments are assessed.
- 5.2 33% of the mothers studied had a Psychiatric Disorder.
- 5.3 30% of the mothers studied were depressed.
- 5.4 Depression was significantly associated with low income
- 5.5 Depression was significantly associated with social isolation.
- 5.6 Depression was significantly associated with Marital Discord.
- 5.7 Depression was significantly associated with difficulties with children and dissatisfaction as a parent.
- 5.8 Women with low income tended to be more likely to be socially isolated than other women.

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OUTLINE OF STUDY:

This study looks at reading ability, intelligence quotient and the prevalence and distribution of psychiatric disorder of ten and eleven year old children in an area of Dublin and how they are related. It also examines the social and family circumstances of these children.

The study was completed in two stages. Initially the reading ability and IQ of all fourth class pupils in an area of Dublin were assessed. Teachers of these children completed a screening questionnaire to assess psychological adjustment. This study examines variations between different schools.

Stage two examines psychological problems in the population. Following results of the screening, a number of children were assessed in detail by interviewing their mothers. Family and social circumstances of children with a psychiatric diagnosis are compared with those without a diagnosis.

This report is divided into five sections.

Section one discusses previous relevant studies and the background to the present study. It describes the population studied and methodology used.

Section two looks at IQ, reading age and psychological adjustment and how they are related.

Section three looks at the prevalence of psychiatric disorder in the population studied.

Section four looks at family and social circumstances and their associations with psychiatric disorder in children.

Section five looks at psychiatric illness in 190 mothers and social and family circumstances associated with depression in women.

SECTION ONE

Overview of Study

RESEARCH OVERVIEW.

The aim of this study is to define the prevalence of child psychological problems in a given population in Ireland and to assess the significance of educational attainment, IQ and family circumstances in relation to these problems.

It is accepted that child behavioural deviance and psychiatric impairment in children is not uncommon. (Rutter et al. 1970). Studies in Ireland and elsewhere suggest that prevalence of psychological problems is higher in urban than in rural populations, in lower socio-economic groups, in deprived environments and where there is a high prevalence of parental problems. (Gath et al 1972, McNestry et al 1988). Many previous Irish studies have suffered from having small samples or a high proportion of the chosen population refusing to cooperate.

Over the past two decades a number of epidemiological studies of maladjustment in schoolchildren have been carried out in England, America and Europe. These have reported rates of maladjustment ranging from 6% to 30%. In Ireland a prevalence of 17.3% was found in a group of Dublin schoolchildren. Boys were more likely than girls to be conduct disordered. (McCarthy and O'Boyle 1986). Lynch et al 1987 found a prevalence of 18.6%. They used a teacher screening test which showed a behavioural deviance of 35.5%, a parental interview which showed a prevalence of 23.2% and a Child Psychiatric interview which showed a

study was 43, all boys from socially disadvantaged areas. Murphy et al 1989, in a study of 80 10 year old boys in a Dublin primary school found that 40% scored as on the Rutter B2 scale. Barton and Fitzgerald 1986 compared the prevalence of deviance in girls from privileged backgrounds with those from disadvantaged backgrounds. Using Rutter B2 scale they found 32% of the sample from the disadvantaged background showed evidence of behavioural deviance, while the rate in the privileged group was 5%. O'Connor et al (1988) in a large study in Limerick found 11% of primary school children to exhibit psychological deviance and, correcting for false negative results, they estimated that the true prevalence of maladjustment was 14%

This present study concentrates on 10 and 11 year old children. Along with screening for psychological deviance, a selected sample of children are studied in detail, providing a means of estimating true prevalence within the population studied.

Intellectual ability is determined by many factors. Rutter and Madge (1976) have shown that there are substantial connections between parental social class and IQ. While genetic influences are important it is also accepted that the range of experiences available to the child is important. Rutter et al (1975) found a higher rate of psychological deviance among children with low IQ. O'Connor et al (1988) have found a marked increase in intellectual functioning in Irish children since 1972 with 17% of children considered intellectually superior. They also found that 2% of children in normal schools are functioning in the mentally handicapped range. Porteus (1988) studying children in Cork

found that 4% of children in normal schools were intellectually impaired. This study uses the same screening procedure as that used in Limerick (O'Connor 1988) and looks at area differences in intellectual functioning.

Of all the problems which concern teachers and parents of school aged children, learning difficulties are the most common. Rutter has repeatedly found an association with both conduct and emotional disorders in children with learning difficulties. Reading has been chosen in this study to indicate learning difficulties. Rutter (1975) found 19% of Inner London children to be reading below average. The British National Child Development Study (1972) found 48% of children of Social Class 5 were poor readers compared with 8% of those in Social Class 1. Swan (1978) found an association in Irish children between reading ability and social circumstances, with children who were socially deprived more likely to have poor reading ability. O'Connor et al (1988) found 28% of Limerick schoolchildren were reading below average. They rated 42% of children in schools designated as 'Disadvantaged' by the Department of Education as being very poor readers. In assessing reading ability Rutter has stressed the importance of assessing both general reading retardation and specific reading retardation. 9.9% of Rutter's Inner London group (1975) had specific reading retardation, with 3.3% of children on the Isle of Wight with specific reading retardation, showing the variation in different areas. 5% of Limerick children (O'Connor et al 1988) were reported to have specific reading retardation.

This study assesses reading ability and the associations between reading, IQ, psychological adjustment and area differences.

METHOD

Fourth-class pupils were chosen for this study because the reliability and validity of psychiatric and psychological measures have already been established for 10 and 11 year old children, and because it has been found that this is an appropriate age for studying child psychiatric disorders. (Rutter, Tizard and Whitmore, 1970). The area chosen for study was in Dublin. The area studied consists of a number of private housing estates and local authority estates of houses and low rise flats.

Fourth-class pupils in schools within the area were assessed. Schools for mentally handicapped were excluded from the study.

The strategy of investigation was based on earlier surveys carried out in the U.K. (Rutter, Tizard and Whitmore 1970, Rutter, Cox et al 1975). A two stage procedure was used to identify children with psychiatric disorder.

Firstly, the total population was studied in the summer term of fourth class by means of screening procedures. Children were screened for Psychological disorder, Reading Ability and Intelligence Quotient.

From this population one in three of those whose results from the screening for Psychological disorder suggested that they might have a disorder were selected for further study. A similarly sized control group was also studied, these were chosen by selecting one in sixteen of the remaining children. In the second stage, during the summer holidays and the first term of fifth class, those selected were studied intensively.

Screening Procedures

The screening instrument used to assess psychological deviance was Rutter's B2 teachers scale. This is a questionnaire which has 26 descriptions of behaviour against which the teacher is asked to indicate whether each description 'does not apply', 'applies somewhat' or 'definitely applies' to the child in question. These ratings are scored 0, 1, and 2 respectively, and the scores are added together to produce a final score. The items cover the main common emotional and behavioural problems of children as they might be seen in a school setting. A cut off point of 9 or more was used as an operational definition of deviance on the questionnaire. (Rutter 1967)

Each child completed the Standard Ravens Progressive Matrices to assess IQ level (Raven 1983). This is a non-verbal culture reduced test which is intended to provide an indication of the individual's intellectual capacity; of his/her abilities for observation, clear thinking and reasoning. The test can be administered in a group setting and is suitable for all ages. Extensive work has been carried out on the standardisation of the SPM, including a study of Irish children in 1972, (Raven 1983) in which standards of performance have been determined for an Irish population. The SPM has been shown to be a reliable test of intellectual capacity in terms of test retest reliability and in terms of the consistency with which different items of the test measure the same capacity. (Raven et al 1983). The test consists of 60 different problems divided into 5 sets of 12. Each problem consists of a pattern with a piece missing. The individual's task is to find the piece which completes the pattern from a set of given alternatives, each of which is the right shape to fit the blank space but only one is the right pattern. In each set the first problem is easy and the problems which follow become progressively more difficult. The child goes through the test from beginning to end, noting answers on a separate answer sheet. The score is the total number of correct answers. It is possible to grade scores from previously determined Irish norms.

Reading was assessed using The MICRA-T Level 3 reading attainment screening test. This is a test which has been designed, constructed and standardised for use in Irish primary schools. (Wall and Burke 1988). Level 3 is designed for use in most classroom situations from the

beginning of fourth class until the end of sixth class. The test consists of five CLOZE passages which encompass both narrative and expository material. Deletions from the text are made in a deliberately selective manner. The final passage is followed by a set of direct comprehension questions which is intended to probe the extent to which material from the different parts of the passage have been processed and integrated by the reader. The scoring system allows results to be expressed in terms of reading ages, standard scores and percentiles.

In addition the name, sex and date of birth was obtained on all children. A question on child's father's employment status and occupation was optional, at the request of teachers. Most declined to give this information.

Each B2 questionnaire was completed and scored by the childrens' teachers. The teachers administered the reading test after a researcher trained them. IQ assessment was carried out in a group setting by a researcher who was a primary school teacher given training in the administration of Ravens Progressive Matrices.

Intensive individual examination.

Two groups of children were selected for individual study; (1) a control group chosen by taking every 16th child with a score of 8 or less on the B2 screening test, and (2) one in three children with scores of 9 or more on the B2 test.

In each case the children were studied in the same way, the investigator always being unaware of the reason for selection, in order to avoid the possibility of bias due to prior expectation.

Each child's mother was interviewed for two to three hours at home by a psychiatrist who was an experienced and trained interviewer. A standardised approach was used (Graham and Rutter Module B 1983) to assess psychiatric disorder. A series of set questions covering a wide range of possible emotional and behavioural problems was asked in all cases. The focus of the interview was on the previous three months. For each item of possible clinical importance, information was sought systematically about the severity and frequency of the behaviour, when it began, exactly how it was manifested, what made it better or worse, the developmental course, in what situations it arose and under what conditions it did not appear. The exact nature of the probes was left to the interviewer but a comprehensive description was required and generalisations or unsubstantiated inferences were not sufficient.

A similar semi structured interview was used to assess social conditions and social supports. (Clare and Cairns 1978). This interview, which takes approximately 45 minutes to administer, covers housing, finance, social

and leisure activities and relationships with significant individuals in the mothers life. In each area the interviewer assessed opportunity, management and satisfaction on a four point scale.

Mothers were assessed for psychiatric illness using Goldberg's Clinical Interview. This is a semi structured interview schedule designed for use in community surveys and general practice. The schedule is divided into four sections. The first is unstructured and consists of sub-headings for brief recordings of the patient's past and present medical history. The second part is more detailed and systematically enquires about any psychiatric symptoms which the person may have experienced in the last month. The third part is unstructured and permits the interviewer to collect as much information on family history as is deemed necessary to make a clinical assessment. The fourth section permits the interviewer to record abnormalities observed during the interview on twelve five point scales. The ratings represent the interviewer's view of 'manifest abnormalities'. A diagnosis is made by combining findings on all sections. The strength of this schedule lies in its reliability; the overall reliability coefficient derived from the analysis of variance is +0.92. (Goldberg and Blackwell 1970).

Mothers also completed The Malaise Inventory. (Rutter 1970). This inventory consists of twenty four YES/NO questions on physical and emotional states. Five or more affirmative answers were taken as indicative of emotional disturbance. (Rutter 1970).

All interviews were completed by the same researcher, an experienced psychiatrist who was trained in the use of the interview schedules.

Reliability was assessed by a) another psychiatrist attending a number of interviews and rating schedules independently, b) another psychiatrist rating schedules on the verbatim information obtained at a number of interviews, c) another psychiatrist deciding on the present or absence of diagnosis having access only to scores given on each item.

Results and Statistical Analysis.

The statistics used in this study have three basic aims; to describe the frequency of abnormalities in the population studied; to assess differences between different groups within the population; and to establish what factors are more commonly associated with abnormality;

Graphs and tables are used throughout the text and in the appendices to describe the population along various parameters.

Differences between groups within the population is assessed by measuring the association between two groups. By using the chi-squared test of significance it is possible to state if differences observed are due to chance or arise because of a significant difference between the two groups. Probabilities of there being a real difference are calculated; probabilities of 5% and less are accepted as significant. i.e. $p < 0.05$.

Discriminant analysis is a method of discriminating groups from one another on the basis of a number of variables. Stepwise discriminant analysis is used in Section Four and Section Five when the effects of environment on children's and mothers' mental health is assessed. A more detailed discussion of this technique is given in these sections.

SUMMARY: SECTION ONE.

1. This study looks at the psychological adjustment in 10 and 11 year old children.

2. Reading Attainment and I.Q. are assessed.

3. Social environment, mothers' mental health and their social adjustment are assessed.

4. The study and results are reported in four sections: Section Two describes screening procedures and results: Section Three looks at the prevalence of child psychiatric disorder: Section Four describes the social environment of disordered children and Section Five is a study of Depression in Mothers.

SECTION TWO

Psychological Adjustment,
Reading Attainment and
Intelligence.

A Screening Study

SECTION TWO

A SCREENING STUDY OF
READING ABILITY , INTELLIGENCE AND PSYCHOLOGICAL ADJUSTMENT IN CHILDREN.

INTRODUCTION

This study looks at the IQ, reading ability and the prevalence of psychological deviance in 10 year old children. The methods used to investigate are discussed initially. Each area is then dealt with individually. Finally the relationships between the areas are studied and the differences between various schools are discussed.

METHOD.

The primary schools were contacted early in 1989 and the nature of the study was explained to the principal of each school. The parents were informed in writing about the study. Children were assessed in the summer term of fourth class. Teachers of the pupils were asked to complete a *B2 Questionnaire* on each pupil. This questionnaire focuses on 26 items of behaviour. The items cover the main common emotional and behavioural problems of children as they might be seen in a school setting. Each item is given a score of 0 if it 'doesn't apply', 1 if it 'applies somewhat' and 2 if it 'certainly applies' and the scores are added together to produce a final score. Thus each student is rated as somewhere between 0 - 52. A cut off point of 9 or more was used as an operational definition of deviance on the questionnaire. (Rutter 1967).

A researcher visited each school and carried out reading and IQ assessments. Reading was assessed using the *MICRA-T Reading Attainment Test, Level 3*. This is a test which has been designed, constructed and standardised for use in Irish primary schools. (Burke and Wall 1988)

Level 3 is designed for use in most classroom situations from the beginning of fourth class until the end of Sixth class. The test consists of five CLOZE passages which encompass both narrative and expository material. The deletions from the test have been made in a deliberately selective manner rather than in a random fashion. The final passage is followed by a set of direct comprehension questions which is intended to probe the extent to which material from different parts of the passage have been processed and integrated by the reader. A flexible scoring system allows results to be expressed in terms of reading ages, standard scores and percentiles.

IQ was assessed using *Ravens Standard Progressive Matrices (SPM)*. The SPM is a non-verbal test which is intended to provide an indication of the individual's intellectual capacity; of his/her abilities for observation, clear thinking and reasoning. The test is suitable for all ages and can be administered on a group basis. It is argued that test results are not affected by socio-economic background. (Raven 1983)

Extensive work has been carried out on the standardisation of the SPM, including a study of Irish children in 1972. (Burt et al 1972) Standards of performance have been determined for an Irish population. The SPM has been shown to be a reliable test of intellectual capacity in terms of test retest reliability and in terms of the consistency with which different items of the test measure the same capacity. (Raven et al 1983). The test consists of 60 different problems divided into 5 sets of 12. Each problem consists of a pattern with a piece missing. The individual's task is to find the piece which completes the pattern from a set of given alternatives, each of which fits the blank space but only

one of which gives the correct pattern. In each set the first problem is as nearly as possible to being self evident. The problems which follow become progressively more difficult. The child goes through the test from beginning to end , working at his/her own pace, noting on an answer sheet for each problem the number of the piece which will complete the pattern. The score is the total number of patterns for which the completing piece has been correctly identified..

RESULTS

Psychological Adjustment

39 schools out of 40 schools approached took part in the survey. A total number of 2029 children were rated on B2 Questionnaire. This included 1094 boys and 935 girls. all children were in fourth class, ages ranged from 9 years and 3 months to 12 years and 11 months. 90% of children were aged between 9 years and 8 months and 11 years and two months.

The Department of Education categorizes schools into various types depending on the perceived needs of the majority of the children in the school. Schools with a large number of children from socially deprived backgrounds are categorized as 'Disadvantaged'. Those considered to have greater need are given a concession teacher and are classified as 'Disadvantaged with a concession teacher'. For the purposes of this study the 39 schools are divided into those which are 'Disadvantaged

with a concession teacher'; 'Disadvantaged'; 'Mixed' to indicate schools catering for children from socially disadvantaged and advantaged backgrounds, and 'Advantaged' to indicate schools where the majority of the pupils are from advantaged backgrounds.

567 children were in Disadvantaged schools with a concession teacher as defined by the Department of Education (Disadv + con); 344 were in Disadvantaged schools as defined by the Department of Education (Disadv); 481 were in schools catering for a mixture of children from deprived and privileged backgrounds (Mixed); and 637 were in schools catering for children from mainly privilege backgrounds. (Advant.) Table 2.1

Table 2.1

<u>Number of Pupils in Different School Types.</u>				
<u>School Type</u>	<u>Disadv + con</u>	<u>Disadv</u>	<u>Mixed</u>	<u>Advan</u>
No. of Pupils	567	344	481	637

337(16.6%) children were found to have deviant scores on B2, with boys showing a significantly higher rate. Table 2.2. Fig. 2.1. 70% of those deviant were conduct disordered, 23.6% were emotionally disturbed and 6.6% had mixed conduct and emotional disorder. Boys were significantly more disturbed with 20.8% scoring in the deviant range, compared with 11.7% of girls.

When individual items of the B2 were studied teachers reported 171(8.5%) as being restless, with 158 being fidgety; only 5.4% were reported as having poor concentration. Table 2.3.

On antisocial items, truanting was rare with only 0.4% definitely truanting. 7.4% were thought to bully somewhat with only 2.9% definitely bullying. 54 (3.6%) children were known to steal and 1.1% stole frequently.

On relationship items, 41 children or 2.0% were not liked by other children. 11.8% were somewhat irritable with 6% definitely irritable. 3.3% of children were described as being definitely solitary.

54(2.7%) of children tended to worry excessively and 40(2.0%) children were regarded as being definitely miserable with 10.3% being miserable some of the time. School refusal was very rare with this label applying somewhat to 1.5% and definitely to 0.4%

258(12.9%) were somewhat resentful on being corrected and 5.3% were definitely resentful. These items are shown on Table 2.3.

Table 2.2

Psychological Deviance in Children.			
B2 Result	Value	Frequency	Valid%
Not Deviant	1.00	1692	83.4%
Deviant	2.00	337	16.6%

Table 2.3

PSYCHOLOGICAL DEVIANCE IN BOYS AND GIRLS USING TEACHERS B2 SCALE.			
	Males N = 1094	Females N = 935	Chi-Square
B2 Deviance			
Not deviant	79.2%	88.3%	
Deviant	20.8%	11.7%	**** 30.03562
**** = $p < 0.0001$ D.F.=1			

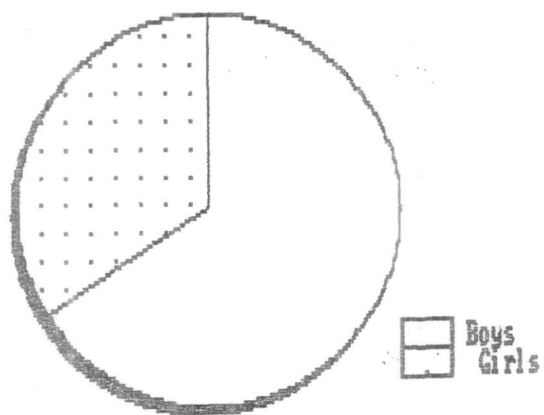


FIG. 2.1 Psychological Deviance in Boys and Girls on B2

Table 2.3

B2 ITEMS FREQUENCY.

Behaviour	Score	No. of children	Percent
'Motor Items'			
Restlessness	0	1461	72.9%
	1	373	18.6%
	2	171	8.5%
Fidgety	0	1399	69.8%
	1	447	22.3%
	2	158	7.9%
Twitches	0	1918	95.6%
	1	75	3.7%
	2	14	0.7%
Poor	0	1542	77.0%
Concentration	1	353	17.6%
	2	108	5.4%
'Antisocial Items'			
Truanting	0	1944	94.9%
	1	53	2.6%
	2	9	0.4%
Destructive	0	1826	91.2%
	1	131	6.5%
	2	46	2.3%
Fights	0	1624	81.9%
	1	282	14.3%
	2	99	4.8%
Disobedient	0	1567	78.2%
	1	314	15.7%
	2	123	6.1%
Lies	0	1739	86.8%
	1	198	9.9%
	2	66	3.3%
Steals	0	1950	97.3%
	1	31	1.5%
	2	23	1.1%
Bullies	0	1794	89.7%
	1	148	7.4%
	2	57	2.9%

0 = Does not apply; 1 = Applies somewhat; 2 = Definitely Applies.

Table 2.3 (cont)

Behaviour 'Relationship Items'	Score	No. of children	Percent
Not Liked	0	1779	88.7%
	1	186	9.3%
	2	41	2.0%
Irritable	0	1647	82.1%
	1	238	11.8%
	2	120	6.0%
Solitary	0	1714	85.5%
	1	224	11.2%
	2	67	3.3%
'Neurotic Items'			
Worried	0	1559	77.9%
	1	389	19.4%
	2	54	2.7%
Miserable	0	1760	87.7%
	1	207	10.3%
	2	40	2.0%
Tears on arrival at school (or sch. refusal)	0	1966	98.1%
	1	30	1.5%
	2	9	0.4%
Absent from school for trivial reasons	0	1768	88.2
	1	157	7.8%
	2	79	3.9%
Fearful	0	1663	83.0%
	1	300	15.0%
	2	41	2.0%
Fussy	0	1869	93.4%
	1	118	5.9%
	2	15	0.7%
Apathetic	0	1647	82.2%
	1	291	14.5%
	2	66	3.3%

0 = Does not apply; 1 = Applies somewhat; 2 = Definitely Applies.

Table 2.3 (cont)

Behaviour 'Other Items'	Score	No. of children	Percent
Frequent	0	1874	93.5%
aches/pains	1	102	
	2	28	1.4%
Thumbsucking	0	1930	96.2%
	1	54	2.7%
	2	23	1.1%
Nail Biting	0	1786	89.2%
	1	120	6.0%
	2	96	4.8%
Resentful or	0	1638	81.8%
	1	258	12.9%
	2	106	5.3%
<hr/>			
Developmental Items'			
Stammer	0	1940	96.9%
	1	48	2.4%
	2	14	0.7%

0 = Does not apply; 1 = Applies somewhat; 2 = Definitely Applies.

TABLE 2.4 Individual behaviour items of B2 in boys and girls.

Behaviour		Boys	Girls	Chi-Square
Q1				
Restlessness	0	66.6%	80.2%	
	1	22.3%	14.2%	
	2	11.1	5.5%	47.77326 ****
Q2				
Truanting	0	95.7%	98.4%	
	1	3.5%	1.6%	
	2	0.8%	0%	14.68758 ***
Q3				
Fidgety	0	62.6%	78.3%	
	1	26.9%	16.9%	
	2	10.5%	4.8%	60.84534 ****
Q4				
Destructive	0	88.3%	94.6%	
	1	7.9%	4.9%	
	2	3.8%	0.5%	32.14502 ****
Q5				
Fights	0	75.8%	87.2%	
	1	17.8%	9.7%	
	2	6.4%	3.2%	42.01419 ****
Q6				
Not liked	0	87.5%	90.1%	
	1	10.6%	7.7%	
	2	1.9%	2.2%	4.96007 NS
Q7				
Worried	0	81.0%	74.2%	
	1	17.9%	21.2%	
	2	1.1%	4.6%	27.99097 **** ^s
Q8				
Solitary	0	84.3%	86.9%	
	1	13.5%	8.4%	
	2	2.2%	4.7%	21.35210 ****
Q9				
Irritable	0	77.1%	88.0%	
	1	15.2%	7.9%	
	2	7.6%	4.0%	40.33359 ****

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$; NS = Not Significant.

Table 2.4(cont.)
Behaviour

		Boys	Girls	Chi-Square
Q10				
Miserable	0	88.7%	86.6%	3.08477 NS
	1	9.8%	11.0%	
	2	1.6%	2.5%	
Q11				
Twitches	0	93.8%	97.6%	21.08531 ****
	1	5.5%	1.6%	
	2	0.6%	0.8%	
Q12				
Thumbsucking	0	96.0%	96.32	0.43505 NS
	1	2.7%	2.7%	
	2	1.3%	1.0%	
Q13				
Nail biting	0	87.4%	91.3%	8.62075 **
	1	6.6%	5.2%	
	2	5.9%	3.5%	
Q14				
Absent from	0	87.5%	89.1%	1.36751 NS
school for	1	8.4%	7.2%	
trivial reasons	2	4.2%	3.7%	
Q15				
Disobedient	0	72.0%	85.4%	71.85658 ****
	1	18.2%	12.7%	
	2	9.8%	1.8%	
Q16				
Poor	0	70.8%	84.2%	52.90630 ****
concentration	1	21.7%	12.8%	
	2	7.5%	2.9%	
Q17				
Fearful	0	84.1%	81.7%	2.19833 NS
	1	14.0	16.1%	
	2	1.8%	2.3%	
Q18				
Fussy	0	94.3%	92.3%	4.41067 NS
	1	5.3%	6.6%	
	2	0.5%	1.1%	
Q19				
Lies	0	82.5%	92.0%	39.63093 ****
	1	13.0%	6.2%	
	2	4.5%	1.8%	

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$; NS = Not Significant.

Table 2.4 (cont.)

Behaviour		Boys	Girls	Chi-Square
Q20				
Steals	0	96.3%	98.5%	
	1	1.9%	1.1%	
	2	1.8%	0.4%	10.14143 **
Q21				
Apathetic	0	77.4%	87.8%	
	1	18.6%	9.8%	
	2	4.1%	2.4%	37.33232 ****
Q22				
Frequent aches/pains	0	94.5%	92.4%	
	1	4.2%	6.2%	
	2	1.4%	1.4%	4.27329 NS
Q23				
Tears on arrival at school (or sch. refusal)	0	97.9%	98.3%	
	1	1.7%	1.3%	
	2	0.5%	0.4%	0.44109 NS
Q24				
Stammer	0	95.2%	98.9%	
	1	3.9%	0.7%	
	2	0.9%	0.4%	24.04264 ****
Q25				
Resentful or aggressive when corrected	0	76.2%	88.5%	
	1	16.3%	8.9%	
	2	7.6%	2.6%	53.28496 ****
Q26				
Bullies	0	84.8%	95.5%	
	1	10.8%	3.4%	
	2	4.4%	1.1%	62.46127 ****

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$; NS = Not Significant.

Table 2.4 shows comparisons of boys and girls on individual items on B2. Chi square test of significance show that boys scored significantly higher on all motor items and all antisocial items. The difference was significant at the 0.1% interval for all items except stealing where significance was at 1% level, $p < 0.01$. Girls were significantly more solitary than boys and boys more irritable than girls. Teachers scored girls as worrying more than boys, $p < 0.01$; and there was no significant difference on other neurotic items, although girls were reported as being miserable slightly more often than boys.

Marked disparities were found in behaviour scores in different school types. In all items except 'frequent aches and pains' children in 'disadvantaged' schools scored higher than those in 'advantaged' schools. The significance was at the 1% level on all items. Those children in a 'disadvantaged' school were twice as likely to have deviant score as those in a 'advantaged' school. 22% of children in 'disadvantaged' schools compared to 8% in 'advantaged' schools were deviant.

Table 2.5. BEHAVIOURAL DEVIANCE AND SCHOOL TYPE

	School Type			
	A	B	C	D
Not Deviant	80.1%	74.4%	83.0%	91.5%
Deviant	19.1%	25.6%	17.0%	8.5%

$p < 0.001$

A = Disadvantaged + Concession Teacher; B = Disadvantaged;
C = Mixed; D = Advantaged.

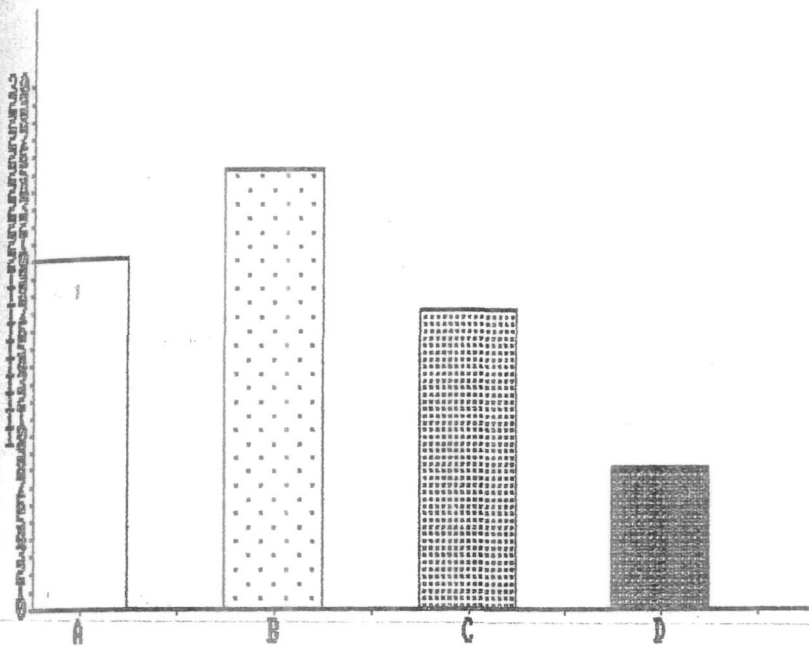


FIG 2.2 Behavioural Deviance and School Types

A = Disadvantaged + ; B = Disadvantaged ; C = Mixed ; D = Advantaged ;

Intelligence.

1925 pupils completed the IQ test. As in the reading test those missing were children who were absent from school on several occasions. IQ results were generally higher than expected for Irish children, with 15.5% scoring above the 95th percentile for the age group. 1% or 20 children were of impaired intelligence. Table 2.7.

No significant difference between boys and girls was recorded. Table 2.8

There was a marked difference between IQ in different school types, with children in the 'disadvantaged' schools scoring lowest and those in 'advantaged' schools scoring highest, the difference was significant at level of $p < 0.001$. Table 2.6.

Table 2.6 INTELLIGENCE AND SCHOOL TYPE

	School Type A	B	C	D
Superior	6.6%	8.4%	15.3%	28.6%
Above Average	26.3%	33.1%	38.8%	38.5%
Average	50.1%	47.5%	40.6%	29.4%
Below Average	14.4%	10.1%	4.7%	3.4%
Impaired	2.5%	0.9%	0.7%	0.2%

$p < 0.001$

A = Disadvantaged + Concession Teacher; B = Disadvantaged;
C = Mixed; D = Advantaged.

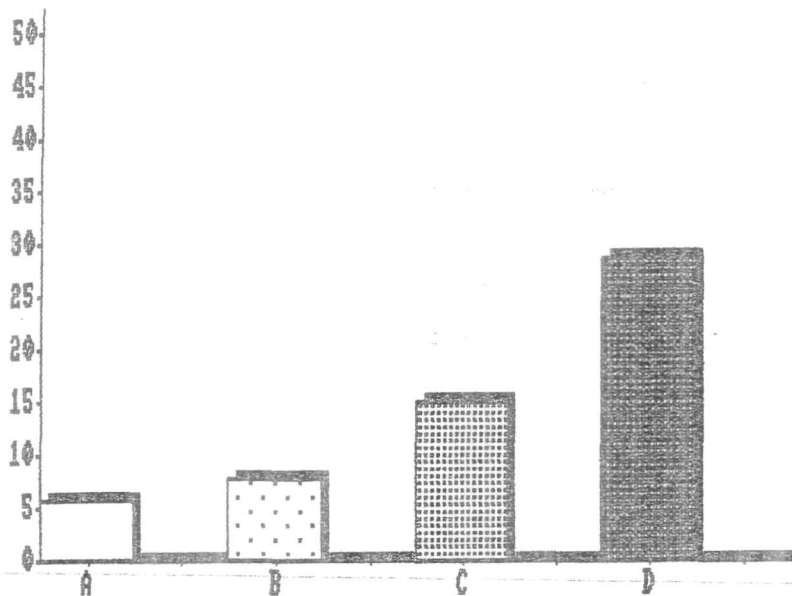


FIG. 2.3 Percentage of children with Superior IQ in different School Types
 A = Disadvantaged + ; B = Disadvantaged ; C = Mixed ; D = Advantaged ;

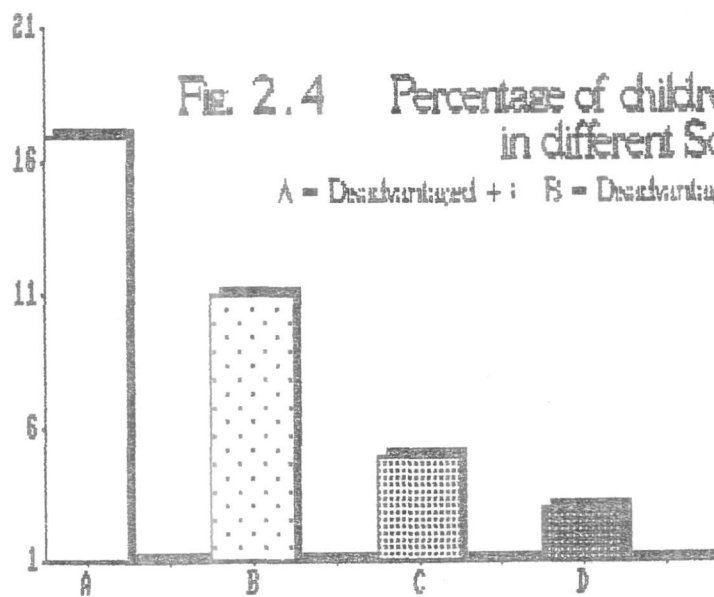


FIG. 2.4 Percentage of children with 'below average' IQ
 in different School Types

A = Disadvantaged + ; B = Disadvantaged ; C = Mixed ; D = Advantaged ;

Table 2.7

Intelligence Quotient in Children.

IQGrade	Value	Frequency	Valid%
Superior	1	310	16.1
Above average	2	662	34.4
Average	3	783	40.7
Below Average	4	150	7.8
Impaired	5	20	1.0

Table 2.8

IQ BOYS AND GIRLS USING RAVENS PROGRESSIVE MATRICES.

	Males N = 1058	Females N = 867	Chi-Square
IQ Grade			
Superior	14.9%	17.9%	
Above average	33.9%	34.9%	
Average	41.9%	39.2%	
Below average	8.1%	7.4%	
Impaired	1.1%	0.9%	3.51254 NS.

NS = Not Significant;
d.f. 4

Reading.

1871 completed the reading test; a number of pupils were absent from schools on the day of assessment, a further visit was made to each school to reduce the missing number, the final number missing was 158.

Reading ability for the entire group was within Irish norms. Table 2.10. 8.2% were found to be reading 36 months and more behind chronological age. 15.6% were reading 24 months behind chronological age and 25% were reading 18 months behind chronological age. Table 2.11. Girls performed better than boys on reading test, reaching significance where $p < 0.01$. Tables 2.13, 2.14. School types showed a marked difference in reading ability, with pupils in 'disadvantaged' schools scoring lowest. Table 2.18

Table 2.18. READING AND SCHOOL TYPE

	School Type			
	A	B	C	D
Superior	1.8%	1.9%	5.4%	10.3%
Above Average	12.7%	17.3%	26.2%	30.95%
Average	45.7%	51.2%	41.6%	46.8%
Below Average	28.4%	23.8%	20.0%	10.1%
Impaired	2.5%	0.9%	0.7%	0.2%
18mths+ ahead	18.1%	23.1%	36.1%	46.1%
Up to 17mths ahead	14.5%	16.9%	18.1%	21.9%
0 to 17 mths behind	30.6%	30.6%	20.7%	18.3%
18 mths behind	36.8%	29.4%	25.1%	13.7%

$p < 0.001$

A = Disadvantaged + Concession Teacher; B = Disadvantaged;
C = Mixed; D = Advantaged.

Table 2.10

Reading Ability in Children.

Reading	Value	Frequency	Percent
Superior	1	105	5.5%
Above average	2	435	22.8%
Average	3	878	46.0%
Below Average	4	372	19.5%
Impaired	5	118	6.2%

Table 2.11

Reading Age minus Chronological Age

36 mths and greater behind	8.2%
24 mths and greater behind	15.6%
18 mths and greater behind	25.0%

Table 2.12

Reading Age in Children.

Reading in months	Frequency	Valid%
18mths or more ahead	612	29.85
Up to 17mths ahead	341	18.2
0 to 17mths behind	451	24.1
18mths + behind	467	25.0

Table 2.13

READING IN BOYS AND GIRLS USING MICRA T READING TEST.			
Reading Grade	Males N = 1010	Females N = 897	Chi-Square
Superior	5.2%	5.8%	
Above average	21.7%	24.0%	
Average	45.1%	47.0%	
Below average	19.8%	19.2%	
Impaired	8.1%	4.0%	** 14.75871

** = $p < 0.01$; * = $p < 0.05$; d.f.4

Table 2.14

READING IN BOYS AND GIRLS USING MICRA T READING TEST.			
18mths ahead	31.4%	34.2%	
Up to 17 mths ahead	16.5%	20.1%	
0 to 17 mths behind	24.8%	23.3%	
18 mths behind	27.2%	22.4%	* 9.24469

** = $p < 0.01$; * = $p < 0.05$; d.f 3.

Fig 2.5 Percentage of children reading 18 months ahead of norm.
in different school types

A = Disadvantaged + ; B = Disadvantaged ; C = Mixed ; D = Advantaged ;

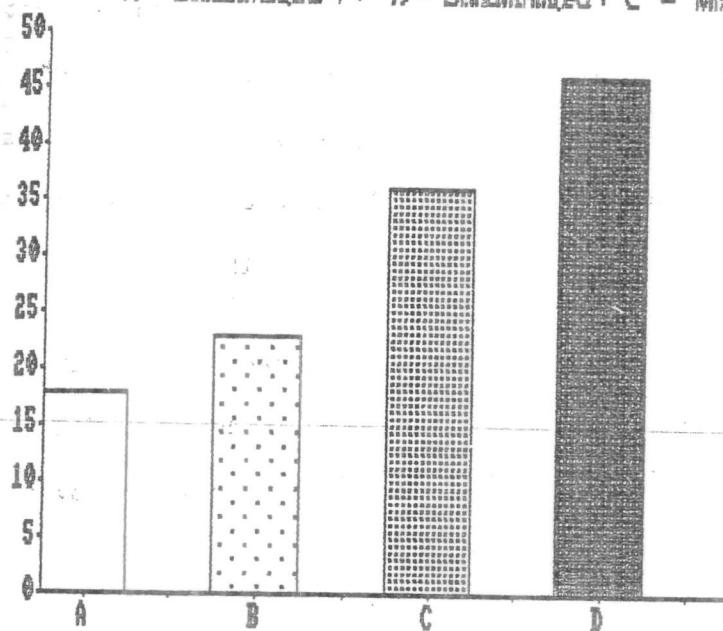
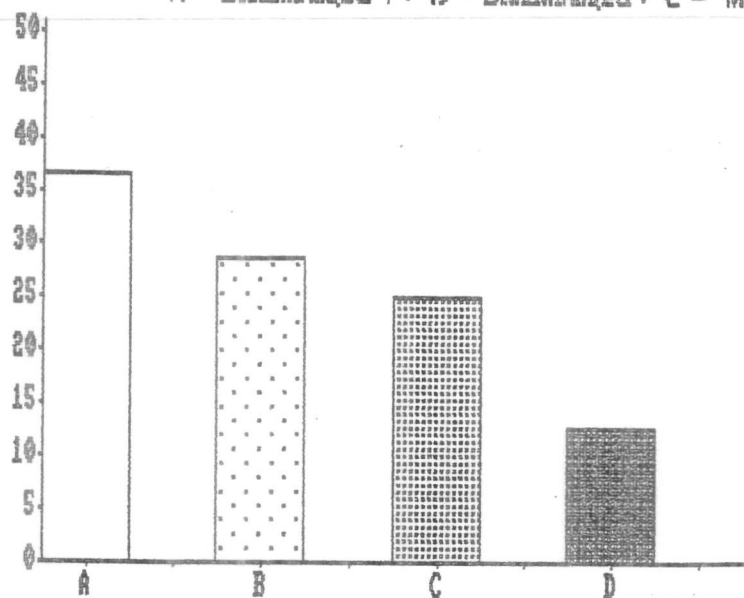


Fig 2.6 Percentage of children reading 18 months behind the norm
in different school types

A = Disadvantaged + ; B = Disadvantaged ; C = Mixed ; D = Advantaged ;



Behaviour, Intelligence and Reading in Children.

There was a highly significant association between IQ and Behavioural Deviance. Table 2.15. Those found to be behaviourally deviant were less likely to be of superior intelligence, $p < 0.001$. Those with behavioural deviance were also more likely to have reading difficulties Table 2.16. 50% of those rated 'deviant' were 18 mths or more behind in reading, whereas only 21% of those 'not deviant' were 18 mths behind.

IQ and Reading ability are significantly associated, Table 2.17.

However a number of children have a marked discrepancy between IQ and Reading ability. 4.6% of those of superior intelligence are reading at 18mths behind chronological age.

Table 2.15

INTELLIGENCE OF CHILDREN AND PSYCHOLOGICAL ADJUSTMENT.			
IQ Grade	B2 Result		Chi-Square
	Not deviant N=1588	Deviant N=314	
Superior	18.2%	4.8%	**** 107.41253
Above average	36.8%	22.9%	
Average	38.4%	52.9%	
Below average	6.0%	16.6%	
Impaired	0.7%	2.9%	

D.F. =4 No difference when controlled for gender.

**** + *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$;

Table 2.16

READING AGE AND PSYCHOLOGICAL ADJUSTMENT			
Reading Age	B2 Result		Chi-Square
	Not deviant N = 1594	Deviant 257	
18 mths or more ahead	35.3%	15.2%	**** 108.86174
Up to 17 mths ahead	19.4%	12.5%	
0 to 17 mths behind	24.3%	22.2%	
18 mths behind	21.0%	50.2%	

D.F. =3 No difference when controlled for gender.

**** + *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$;

Table 2.17

READING AGE AND IQ GRADE.					
Reading Age	IQ Grade				
	Superior	Above Average	Average	Below Average	Impaired
18 mths or more ahead	65.0%	43.2%	15.9%	3.3%	0%
0 to 17 mths ahead	19.1%	19.7%	18.8%	6.6%	0%
0 to 17 mths behind	11.2%	23.2%	29.3%	26.4%	18.8%
18 mths behind	4.6%	13.9%	36.0%	63.6%	81.3%

**** + *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$;

d.f 12.

DISCUSSION.

The group studied was quite typical of a city suburb with children from a wide range of backgrounds. In this area the majority of children attend schools that were nearest their home and so children from similar social backgrounds tended to attend the same schools. Because of housing policies pupils from local authority housing, for example, tended to be clustered in one school type and children from more privileged backgrounds tended to be clustered in another school type.

The overall rate of behavioural deviance of 16.6% suggests that one in 6 children is maladjusted. This is similar to that reported in other Dublin studies, (McCarthy and Boyle 1986, Lynch et al 1987). The greater number of boys than girls who are deviant has also been described in both Irish and International studies. (Stone et al 1990 Rutter et al 1970). It is well accepted that psychological disorder is more common in boys than girls in early childhood, tends to reach an almost equal sex ratio in pre teenage years and then shifts to the more adult pattern in which psychological disorders are much more common in women. The marked difference found here - one in nine boys deviant and only one in five girls - deserves comment. Stone et al (1989) found a discrepancy between teachers rating of children on the B2 questionnaire and childrens' own rating using a self rated questionnaire of social difficulty. The discrepancy was most marked in girls. This may indicate that teachers are more likely to be aware of disturbances in boys than in girls. Lynch compared results obtained using B2 questionnaire and a Child Psychiatric Interview, he found 84% agreement

between both, (Lynch 1987) indicating a high reliability of the B2 Questionnaire. As becomes obvious in In Section 3 of this paper B2 was significantly correlated with results on Parent Interview with child and no difference was found for reliability in boys and girls. This would indicate that the sex difference is real and not apparent. 70% of deviance is due to conduct disorder which tends to be much commoner in boys than girls. It has been noted in studies of behaviour in children, both disturbed and non disturbed, that boys tend to be more active and more overtly combative than girls. (Mc Farlane 1954, Shaffer et al 1980). Parents and teachers tend to react differently to boys and girls (Haverson and Waldron 1970), expecting and encouraging boys to be more active. As Macoby and Jacklin have commented, in relation to the genesis of aggression, it is remarkable how social processes and biological predisposition reinforce each other. (Macoby and Jacklin 1974).

70% of the deviant group were found to have a conduct disorder and 23.4% had an emotional disorder. This gives a rate of 11.6% of the total population with conduct disorder and 4% with emotional disorder. Rutter found a rate of 4% with conduct disorder in The Isle of Wight but a higher rate in urban populations. The rate for emotional disorders has been found to be 2.5% in small town communities and higher in urban areas. Our results would concur with this. It is well accepted that treatment outcome and long term prognosis tends to be better for children with emotional rather than conduct disorder.

This high prevalence of conduct disorder has many implications for child psychiatric services. Kolvin (1981) has shown that both Rogerian

style group psychotherapy and behavioural and nurturing treatments carried out by teachers in the classroom significantly improved the adjustment of both emotionally and conduct disordered children. McAuley (1982) pointed to evidence that children from relatively stable families respond well to behavioural and family therapies. Those from socially deprived, isolated multi-problem families responded less well. He stresses the need for behaviour therapists to look beyond the parent child interaction and focus on other critical factors, for example maternal depression. Section Four of this study shows that many children who are disordered come from multi-problem isolated families and this would confirm the need for a treatment approach which is broader than strictly behavioural.

The individual items of deviant behaviour are interesting. Many children are reported by teachers as having oddities of behaviour which are of no significance with regard to their mental health. Kanner (1957) commented that many psychiatrists tended to exaggerate the seriousness of individual items of behaviour. It is now generally accepted that so called 'neurotic traits' of childhood such as nailbiting, thumbsucking and stammering are quite common and are not valid indicators of emotional disorder. (Rutter and Hersov 1985).

The marked difference in behavioural deviance in different school types is disturbing. This difference has been widely shown in other studies, (Barton and Fitzgerald 1986; O'Connor et al 1988; Gath et al 1977; Power et al 1972). The main questions to be asked relate to whether these differences reflect the effects of particular schools on childrens behaviour or do they reflect differences already apparent at

school entry. Rutter in 1979 found differences between schools for rates of delinquency, behavioural disturbance, examination success and pupil attendance in secondary school children. These differences remained after controlling for the childrens' characteristics and background at the time of transfer to secondary school, and for the primary schools from which they were drawn. Rutter has also shown that there is a protective effect of above average scholastic attainments in the presence of family adversity. Quinton and Rutter's (1984) follow up of institution reared children found that those with positive school experiences had a better adult outcome. They concluded that schools which foster high self esteem and which promote social and scholastic success reduce the likelihood of emotional and behavioural disturbances.

An assessment of class size and teacher turnover in a number of schools we studied showed no differences between school types. These results suggest that the main differences found in school types relate to the homes of the children assessed. Those in 'disadvantaged' schools were more likely to be living in local authority housing, have families with low income and have a higher rate of marital dysharmony and parental mental illness. Our results show that 'disadvantaged' schools have a higher proportion of children with reading backwardness and low IQ. It would seem reasonable to speculate that teachers in the more disadvantaged schools would therefore be more stressed and face greater difficulty providing the ideal school setting suggested by Quinton and Rutter.

It is also clear that the burden of cherishing children suffering from various forms of disadvantage is unevenly spread among the 39 schools studied. The allocation of resources in the form of teachers seems to be only marginally different. Obviously this aspect of educational policy needs further attention. How can this marked difference in behaviour and educational attainment be addressed, and by whom? It is not a problem unique to Dublin (O'Connor et al 1989). It appears, from our study, to be associated with the fact that children from the same socioeconomic backgrounds tend to attend the same schools.

Much work has been carried out in the U.S. on the effects of compensatory education. Attempts have been made to redistribute pupil populations in order to reduce the concentration of 'deprived' children within particular schools. One means of achieving this has been to 'bus' children from inner city ghettos to advantaged suburban schools. St. John, (1970) and Armor, (1972) have shown that this bussing has no consistent effects on academic achievement, educational or occupational aspirations, academic self-concept or self esteem, or on race relationships. Nevertheless, any changes however slight tend to be for the better rather than for the worse. There is some evidence that black children who have been bussed to the suburbs may be more likely to go to College, although this is associated with a higher dropout rate later. There was also some evidence that bussing increased racial identity and solidarity. It led to a loss in peer identity and a lowering of relative academic position. (Rutter and Madge 1970).

The American Head Start program, which attempted to compensate socially deprived children with increased stimulation in the Pre-school period has encouraged the growth of better thought out and more useful programmes and social action. Smaller more focussed Pre-school projects have been shown to produce important IQ gains, (Di Lorenzo 1969, Karnes 1969). The best results appear to stem from structured programmes with an emphasis on the developement of language. (Bronfenbrenner 1974). There is a tendency for any gains made to be lost during the early school years. This has encouraged the developement of Follow-Through programmes which extend the basic policy of Headstart into primary school and which shows more lasting effects. In England, Gahagan and Gahagan (1970) have shown that a language enrichment programme during the first two years of primary school produces significant increments in childrens use of language .

Home based interventions have shown more encouraging benefits. Programmes aimed at developing mother child understanding, communicaton and activities (Schaefer and Aaronson 1972) and attempts to train mothers through discussion of training activities and general child rearing problems at weekly meetings (Karnes et al 1970) have both been shown to benefit mother and child and other siblings.

A recent developement in Dublin is particularly promising in this regard. Since 1985 The Community Mothers programme has been in progress in some areas in Dublin. Volunteer community mothers are trained to provide support and advice for selected first time mothers in their

area. Each community mother is trained by a family development nurse, who is then available to provide ongoing support as needed. As will be shown in Section Four and Five, many mothers of the children in this study felt socially isolated and many commented that they would have appreciated more interest and support when their children were babies. They would have benefitted from a Community Mothers Programme and we would encourage the extension of such programmes to other parts of Dublin.

Recent initiatives made by the Department of Education in the area of Home/School/Community Liaison Projects are also promising. The aims of this project are to (i) To maximise active participation of children in the learning process, in particular those who might be at risk of failure.; (ii) to promote active cooperation between home, school and relevant community agencies in promoting the educational interests of the children; (iii) to raise awareness in parents of their own capacity to enhance their children's educational process and to assist them in developing relevant skills; (iv) to disseminate the positive outcome of the project throughout the school generally. Teachers are employed to work as full time co-ordinators of home /school /community liaison. Their work involves contact with schools and parents and helps to mobilise all available resources within the home and community. Promises made this Easter (1991) at the I.N.T.O. conference for extension of this service are particularly welcome.

Other projects have recently been commissioned by the Department of Justice for work with young offenders and early school leavers. We would recommend a greater degree of liaison between the Departments of Health, Education and Justice.

The apparent increase in IQ deserves comment. There appears to be a large increase in IQ results obtained by Irish schoolchildren since 1972. Over 16% of children are functioning in the superior grade, the expected rate is 5%. 50% of children are functioning above the 75th percentile, where only 25% would be expected to. This is a result that has been reported in another Irish child population (O'Connor et al 1988) also and similar large gains in IQ over generations have been reported in other countries, all reporting on results obtained using culture reduced tests such as Ravens Progressive Matrices. (Flynn 1987). While few psychologists would accept the adequacy of assessing IQ by such means alone, the gain over 17 years is unexpected. A possible explanation is provided by Brand in the Dept. of Psychology in Edinburgh. He analysed the results of WISC tests on Scottish children in 1961 and 1984. He found a slight rise of 2.5 points per generation. Other reports in Scotland reported rises of 18 points in IQ when culture reduced tests were used. Brand suggests the reason for this discrepancy may be the advent of the permissive society. It has been shown that in studies of individual traits liberalism correlates positively with culture reduced intelligent scores. Brand suggests that higher personal liberalism and increasing levels of liberalism over the years, could

make for quick intuitive responding that would serve testees well on multiple choice, culture reduced tests. Taking the five subsets in the SPM, each subscale is composed of items of increasing difficulty, the last item in each subscale is more difficult than the first item in the next subscale. Therefore if time is spent trying to work out difficult problems early on the child may run out of time to complete easier later items, whereas those who make intelligent guesses on difficult items have a greater chance of scoring highly. This theory of liberalism would also explain IQ gains noted by Flynn (1987) in 14 different countries. Flynn's data included more of the Weschler Performance scales notably coding, a multiple choice test of symbol association and copying at speed. This, notes Flynn, shows the greatest gain over time. This theory needs to be evaluated further but it emphasises the need to accept our results cautiously and the likelihood of overestimation of IQ must be considered. Another possible explanation is that increased stimulation through television has resulted in an overall increase in childrens' visuo spatial abilities. More detailed evaluations of childrens IQ using both verbal and performance tests are needed to clarify this assertion.

Despite reservations about overall IQ results they are useful for comparative purposes. The marked discrepancy between different school types has been already commented on.

Reading ability results followed a normal curve with the expected number of children reading at average ability. Overall a quarter of the children were reading at 18 months behind chronological age, however 36.8% of children in 'disadvantaged +' schools were reading at this level, this is almost three times the level found in children in 'advantaged' schools. While some of this discrepancy can be explained by the variations found in IQ in the different school types it cannot all be explained by this. The discrepancy in reading between different school types is much greater than discrepancy in IQ levels.

The marked differences in both IQ and reading in different school types deserves further comment. We have already postulated that this is likely to be due to characteristics of the child's home rather than particular school characteristics. Such differences have been reported and assessed in other studies. They are thought to relate to differences in family interaction within different social classes. It has been shown that 'middle-class' mothers are more likely to give their children specific instruction on starting school than 'working-class' mothers (Hess and Shipman 1967). Several studies have shown social class difference in language usage, particularly with respect to abstract functioning. When describing an object or event 'middle-class' children tend to be more specific and elaborate in a way which is intelligible without knowing the immediate context. In contrast what the 'working-class' child says is less explicit, makes more assumptions and is only

fully understandable in context. (Hawkins 1969). 'Middle-class' parents are more likely to see toys and play as things which are of educational importance. (Bernstein and Young 1967). While these studies do not show a direct effect of differing family interaction on children intellectual development studies of children reared in institutions would support this view. (Tizard 1964).

Parental attitudes to learning and education are important factors in differences in educational attainment. A child's motivation and aspirations are shaped and influenced by parents expectations. It was noticeable, in our study, that mothers from 'disadvantaged' areas were less likely to enquire about their child's performance on IQ or Reading tests, than more 'advantaged' mothers. It has also been argued that the educational difficulties of poor children are due to a disparity between the skills used at home and those used at school. Ginsberg (1972) has argued that poor children are not in fact disadvantaged but that the problem lies in the schools taking the wrong approach. Cole and Bruner (1971) have also suggested that poor children have the necessary skills but these are not tapped into.

Educationalists will argue as to the reasons for this marked difference we have found in psychological adjustment, IQ and educational

attainment in children from different social backgrounds. Over one third of children in disadvantaged areas are reading 18 months behind chronological age. Over one fifth of those in disadvantaged areas are psychologically maladjusted. These findings appear to us to have far reaching implications. The reasons are many and the solutions needed involve changing social, environmental and educational policies

SUMMARY

- 2.0 2029 fourth class Primary School children were screened for Behavioural deviance, IQ, and Reading Attainment.
- 2.1 16.6% of 2029 children in an area of Dublin were found to be behaviourly deviant.
- 2.2 20% of boys and 11% of girls were deviant.
- 2.3 70% of those deviant were Conduct Disordered.
- 2.4 23.4% of those deviant were Emotionally Disordered.
- 2.5 6.6% of those deviant had a mixed Conduct and Emotional Disorder.
- 2.6 Children from 'socially disadvantaged' homes were more than twice as likely to be deviant than those from 'privileged' homes.
- 2.7 25% of children were reading 18 months behind their chronological age.
- 2.8 A high level of Intelligence Capacity was found with 15.5% of children performing above the 95th percentile. A possible explanation for this is discussed.
- 2.9 A significant association was found between behavioural deviance, IQ and Reading age.
- 2.10 Those children attending schools that catered for predominantly socially deprived children tended to score lower on reading and IQ tests.

SECTION THREE

Prevalence of Child Psychiatric
Disorder

Formal Psychiatric Assessment

INTRODUCTION

It is well accepted that psychiatric disorder occurs in children. Prevalence rates have varied depending on the population studied. Rutter reported rates of 25.4% in Inner London and 12% in The Isle of Wight. (Rutter et al 1974). Irish studies on small groups have shown that behavioural deviance is more prevalent in boys than girls; (Lynch et al 1987) more prevalent in urban rather than rural children; (Fitzgerald and Kinsella 1987) more prevalent in those from disadvantaged backgrounds (Barton and Fitzgerald 1986) and associated with social difficulties (Stone et al 1990) and marital disharmony. (Lucey and Fitzgerald 1989). Prevalence rates have varied from 5% in children from privileged background to 33% in children from disadvantaged ones. (Barton and Fitzgerald. 1986)

Psychological disturbance in children tends to manifest itself as a quantitative rather than qualitative change from the norm. Referral rates to general practitioners, child guidance clinics or school psychologists give a very crude measure of prevalence rates. Screening tests are useful but in the past have been shown to have below 50% true positive rates and 10% false negative rates.. (Rutter 1974). Lynch et al (1987) studied a small group of children in Dublin using screening tests and a psychiatric interview. They found a rate of 18.6% using psychiatric interview and 35.5% using a screening instrument, with 84% agreement between the two. In Cork, Porteus addressed this

problem by a two stage operation in which he screened a large group and then assessed a selected group in detail. He found a prevalence rate of psychiatric illness of 10%. (Porteus 1989).

Most studies in Ireland have concentrated on overall maladjustment and few studies have looked at the prevalence of individual diagnoses or symptoms. These symptoms will be discussed separately in the discussion part of this section.

In this study a large group (2029) children in the community are screened for psychiatric disorder, a smaller group of children are chosen from this group and assessed by psychiatric interview. The results of both tests are used to estimate the true prevalence of psychiatric disorder in the community.

Fourth class pupils in the study schools were screened for psychiatric disorder. The selection of the group has been described in Section 2. This part of the study reports on the intensive assessment of 190 children; from this assessment an estimate of overall prevalence is made; individual symptoms and disorders are discussed,

METHOD

2029 fourth class pupils were screened for psychological deviance using the B2 Teachers Questionnaire as described in Section 2. On the results of this screening two groups of children were selected for further intensive assessment. One group was chosen by taking every third child who obtained a score of 9 or more on the B2; and a control group by taking every 16th child with a score less than 9.

In each case the child was studied in the same way by one investigator, who was unaware of the reason for selection, in order to avoid bias. Each mother of the selected children was sent a short note explaining that an interviewer would call to her home to discuss her child's development. When the interviewer called she explained the nature of the research to the mother and sought verbal permission to proceed with the interview. The interviewer was a psychiatrist who was experienced and trained in the interview schedules. Each mother was interviewed for two to three hours. Interview schedules were used to assess child psychopathology; family and social factors; and mother's psychopathology. In this Section only child's psychopathology will be considered.

Child psychopathology was assessed using *IOV/IL Parental Interview on Childs Psychiatric State, Module B*. (Graham and Rutter 1988) A series of set questions covering a wide range of emotional and behavioural problems was asked in all cases. The focus of the interview was on the

previous three months, and for each item of possible clinical importance, information was sought systematically about the severity and the frequency of the behaviour, when it began, what made it better or worse, the developmental course, in what situations it arose and under what conditions it did not appear. For each item the interviewer gave a score on a four point scale, 0 indicating 'absence of symptom'; 1 'present but causing no social handicap or distress'; 2 'present and causing distress'; 3 'present and causing marked distress'.

On the basis of information obtained the interviewer was in a position to state if the child had a psychiatric illness and to classify it according to ICD 9. A psychiatric diagnosis was made if a number of symptoms of a particular disorder were present, if these symptoms were present consistently for the previous three months, and these symptoms were causing the child or others persistent discomfort. Where an adult type symptom pattern emerged the usual categories of ICD 9 were used. For those milder and less well differentiated cases which were typical childhood disorders the categories of emotional and conduct disorders of childhood were used.

RESULTS

206 children were chosen for intensive study. This included 100 who scored 9 or more on the B2 screening test and 106 'controls' who scored less than 9 on B2. 16 children were unavailable for study. 2 children moved from the area during the study and 14 parents refused to be interviewed. Refusals were higher among families of children with deviant scores on B2. 86 'deviant' children were assessed and 104 'non-deviant'.

117 fathers were employed. 155 children came from families with 5 children or less, with 35 coming from families with more than 5 children. 110 boys and 80 girls were assessed. 59 children were from 'Disadvantaged + Con' schools, 41 were from 'Disadvantaged' schools as defined by the Department of Education, 40 were from schools with children from both working class and middle class background and 50 were from schools with pupils from mainly privileged backgrounds.

Individual Symptoms on Parental Interview on Child Psychiatric Interview.

Of the 190 children assessed 12.2% had a mild physical handicap, 12.6% had marked physical handicap; these included mainly asthma, bronchitis and two children with epilepsy; three children had a severe physical handicap that resulted in marked social consequences.

13.2% of children had contact with child guidance clinics, and 2

children had received inpatient psychiatric treatment. 5.3% had attended their family doctor for a psychosocial problem in the three months prior to the interview.

When asked if they felt their child had difficulties with behaviour or emotions 15.8% answered 'definitely'; 12.6% thought it 'possible, but were unsure' and 14.7% answered 'Yes, but not more than other children'. This was asked before any formal questions on behaviour, in order to avoid any prompting. There was a high correlation between this response and final diagnosis, though there was a tendency for mothers to underestimate the presence of problems.

Table 3.2 shows the frequency of individual items reported by mothers. 10% were reported as being 'worriers'; 16.8% (32) children wet the bed at least once a week, 22 of these were 'primary' enuretics and 9 had been dry for at least one year and were 'secondary' enuretic.

4 children were soiling more than twice a month. All four had acquired bowel control in the past and now and all had continuous soiling without retention.

8 children were considered to be *chronically unhappy* and 4 children were suffering from *major depression*. 16.8% (32) of children were felt to suffer from *loneliness*, with 13 of these distressed by this. 28.4% (54) were rated as being *irritable* and 10.6% (20) had *temper tantrums* where they threw things and half of these were 'aggressive', in that they hit or kicked others during the tantrum. In 13 of these children tantrums occurred at least once a week.

Table 3.2

INDIVIDUAL SYMPTOMS ON PARENT INTERVIEW ON CHILD PSYCHIATRIC SYMPTOMS.

	Frequency N =190	Percent
Headaches	4	2.6%
Stomach Aches	9	5.2%
Worries about health	3	1.6%
Worrying	20	10.6%
Eating Problems	5	2.6%
Sleep Difficulties	6	3.1%
Bedwetting	31	16.3%
Daytime Wetting	3	1.5%
Encoporesis	6	3.2%
Pica	1	0.5%
Chronic Unhappiness	8	4.2%
Major Depression	3	1.6%
Lonliness	32	16.8%
Irritability	54	28.4%
Temper Tantrums	20	10.6%
Fears	41	21.5%
School Refusal	3	1.6%
Obsessions/Compulsions	6	3.2%
Feels People are Against	18	9.5%
Delusions/Hallucinations	0	0%
Being Teased	48	25.4%
Teases Others	27	14.3%
Being Bullied	23	12.3%
Bullies others	20	10.6%

When *specific fears and phobias* are assessed 21.6%(41) of children were fearful to the point that they actively avoided the feared stimulus. The commonest fear was of the dark, with 9 children being extremely fearful with marked avoidance behaviour. *School Refusal* occurred in 3 children, each of whom refused to go to school on two or three occasions in the previous three months. 6 children showed *obsessional behaviour* with definite routines or rituals with distress at interference but causing no social impairment.

In relationships with others 9.5% (18) mothers reported that their children were convinced that *others were out to make trouble for them*; this involved peers, parents and most frequently teachers. No child showed psychotic behaviour. Mothers reported that 25.4% (48) were teased frequently and 16 of these had difficulty coping with this teasing. 14.3% (23) were *bullied 'more than others'* and this caused marked distress for 4 children. 14.3% (27) were thought to tease and 10.6%(20) thought to *bully 'more than others'*. Only one child was considered to cause others major distress with teasing or bullying.

Questions on motor activity resulted in 11.1%(21) of children being rated as *overactive* at home with three children extremely overactive. The same percentage are overactive with others and there is considerable overlap between these two symptoms. 19%(36) were rated as being *restless and fidgety* at home and 13.2%(25) of these are also restless at school. 7.4%(14) of children were reported as being unable to concentrate on any activity for fifteen minutes or more, and

Overall Prevalence of Psychiatric Disorders.

118 (62.1%) children were found to have no psychiatric illness. 62 children were found to have a definite psychiatric disorder; 22 of these were suffering from isolated primary enuresis which was not part of any broader psychiatric disorder. This group is discussed in detail later in the text. Results are discussed both including and excluding enuretics. When enuretics are included about 60% of those with deviant scores on B2 were found to have definite psychiatric disorder as assessed by parent interview. 19 of those with non deviant scores on B2 were found to have definite psychiatric disorder at interview, giving a false negative rate of 18.6%. Table 3.3 shows these results including enuretics as having a 'definite disorder'. Table 3.3B shows the results obtained when enuresis is not included as a 'definite disorder'.

These results show the B2 to have a true positive rate of 61% and a false negative rate of 18.6%. Using these rates the results from screening the original sample of 2029 children can be corrected accordingly to estimate the true prevalence of psychiatric disorder in the area. The prevalence of psychiatric disorder in fourth class pupils in the area studied is estimated to be 25.4% when enuretics are included and 16.3% when enuretics are excluded. Table 3.4A and Table 3.4B.

Table 3.4A

TOTAL PREVALENCE OF CHILD PSYCHIATRIC DISORDER (1)
(includes those with isolated primary enuresis.)

	No. in total population	% of sample with psychiatric disorder	estimated no. with disorder in total popul.
Not selected on screening procedure	1692	18.3%	310
Selected on screening procedure	337	61.6%	207
	Total prevalence = $\frac{517}{2029}$ = 25.4%		

Table 3.4B

TOTAL PREVALENCE OF CHILD PSYCHIATRIC DISORDER (2)
(excluding those with isolated primary enuresis.)

	No. in total population	% of sample with psychiatric disorder	estimated no. with disorder in total popul.
Not selected on screening procedure	1692	10.6%	179
Selected on screening procedure	337	45.3%	153
	Total prevalence = $\frac{332}{2029}$ = 16.3%		

Table 3.5

INDIVIDUAL DIAGNOSES ON 190 CHILDREN.

Diagnosis.	Frequency N=190	Percent.
No Disorder	118	62.1%
Enuresis	22	11.6%
Socialised Conduct Disorder	15	7.9%
Mixed Disorder of Conduct and Emotion	8	4.2%
Misery and Unhappiness (E.D.)	3	1.6%
Unsocialised Conduct Disorder	3	1.6%
Hyperkinetic Syndrome	3	1.6%
Encopresis	3	1.6%
Endogenous Depression	2	1.1%
Phobic Anxiety	1	0.5%
Stammering	1	0.5%
Tics	1	0.5%
Insomnia	1	0.5%
Compulsive Conduct Disorder	1	0.5%
Adjustment Reaction	1	0.5%
Shyness and social Withdrawal (E.D.)	1	0.5%
Hyperkinetic with developmental delay	1	0.5%

This shows 11% of these children had a conduct disorder, 4.7% had an emotional disorder of childhood and 4.2% had mixed conduct and emotional disorder.

DISCUSSION.

The response rate was high with 92% of those chosen being fully assessed. 14 mothers refused to take part in the intensive individual study and two families had moved from the area of study. As is common in all epidemiological studies the non-responders included a higher proportion of children showing behavioural deviance as measured by B2, 14 of the non responders were 'deviant' on B2 and 2 were 'non deviant'.

In all, 62 of the group had a definite psychiatric diagnosis, 25 children had had contact with a child guidance clinic, and 29 mothers thought their child had difficulties with behaviour or emotions. Both these latter results suggest that parents tend to underestimate the problems their children have and that much psychopathology is not identified.

Enuresis.

Over 11 % of children suffering from enuresis at age 10 years is higher than expected. The Isle of Wight Study found 2.9% of boys and 2.2% of girls to be enuretic. Our study found 16% of boys and 6% of girls were wetting the bed at least twice a week.

The aetiology of enuresis is diverse. Genetic elements are known to be important. (Bakwin 1961, 1973; Shaffer 1984). A number of factors indicate that it may be due to an anatomical or functional bladder abnormalities: A significant association between enuresis and urinary tract infections has been reported; (Dodge et al 1970) It has been shown that enuretics pass smaller volumes of urine during micturition than non-enuretics, (Starfield 1967; Shaffer 1984) and there is evidence that the anatomical development of the pelvic floor is delayed in children who wet the bed, and their bladders are more irritable. (Hutch 1972)

It is unproven whether enuresis is a manifestation of psychiatric disorder. Shaffer et al (1984) found that enuretics with a psychiatric disturbance were more likely to have associated speech or language difficulties than those without a psychiatric disturbance. It has been shown that enuresis is more common in those of lower social class; in those living in overcrowded or disadvantaged circumstances and among those reared in institutions. Douglas (1973) found that children who had stressful life events at 3-4 years had a twofold increase in the incidence of enuresis. Such events included family break up through death or divorce, temporary separation from mother for at least a month,

birth of a younger sibling, moving home, admission to hospital and accidents or surgical operations. However such events tend to be associated with chronic disadvantage (Schaffer and Schaffer 1968) and may not be of crucial significance in themselves. Poor training due to illness or distress in mothers results in a higher rate of enuresis. Rutter has commented that children with enuresis often show an increase in psychiatric disturbance but most findings do not support the notion that enuresis is invariably a psychiatric disorder. It must be borne in mind that regardless of aetiology this symptom in itself can result in considerable distress. It appears that there is a multifactorial aetiology and physical and psychosocial factors should be investigated further. Of 31 children with enuresis we found only 9 children had other significant psychiatric problems, with the majority, enuresis was an isolated phenomenon unassociated with any other stress.

Encopresis

A prevalence of 1.5% is very similar to that found by Rutter in 1970 in 10 and 11 year olds. All encopretic children in our study were also enuretic, in keeping with findings of others, (Rutter 1970, Sussar 1967, and Levine 1975). All three children were soiling from infancy. None of the three was attending a doctor for this problem and mothers expressed the fear that bringing the child for professional help would cause too much embarrassment to the child. All three children were from low income families. Two of the children had mothers who were depressed and marital discord was marked in both cases. The other child's mother was not psychiatrically ill and his family life was stable. Such small numbers make presumptions about associations impossible.

Depression in Childhood.

Two children out of the 190 studied were found to be suffering from Endogenous depression. These children had symptoms of persistent depression with sleep disturbance, poor appetite, psychomotor retardation and they felt unloved and unwanted. Their symptoms differed from those children diagnosed as having 'misery and unhappiness' in that their symptoms were similar to the adult form of Depression. Three children were suffering from 'misery and unhappiness' and one child showed unhappiness following the death of his uncle one year previously and he was diagnosed as having an Adjustment reaction. This prevalence of 1.1% of depression in 10 and 11 year old is similar to that found by

Rutter in 1976. Leader et al (1989) found 14% of children attending a Dublin Child Guidance clinic to be depressed.

Anxiety in Childhood.

One child was found to suffer from phobic anxiety to a disabling extent. This child had an abnormal fear of dogs which prevented him from leaving home. Five children (2.6%) were suffering from disabling anxiety and one child was markedly shy with social withdrawal. 41 (21.5%) children in all were found to be suffering from a specific fear. Most of these were afraid of the dark to an extent that a light was always left on at night. This occurred so frequently without any other evidence of psychiatric disorder that it can be taken as a common occurrence in normal children.

be seen in Section Four, children with all forms of psychiatric disorder were more likely to be living in a stressful environment and to have psychiatrically disturbed mothers.

Obsessional Disorders.

No child had a psychiatric disorder with predominant obsessional features. This is as expected in that the prevalence rates in other studies has varied from 0.2% to 1.6% of clinic populations of children and adolescents. (Judd 1965, Hollingsworth et al 1980). 3.2% of children performed rituals and routines and were distressed if there was any interference with these routines. This behaviour did not cause any social impairment in that parents tolerated the routines and in no case did the obsessional behaviour interfere with day to day life. Two of the children had other symptoms of anxiety and four of the children had no other psychiatric symptoms.

Conduct Disorder of Childhood.

10% of children had a conduct disorder with a further 4.2% with mixed disorder of conduct and emotion. Some anti-social items such as destructiveness, truancy, running away, stealing and firesetting tended to occur only in those found to have a conduct disorder, whereas other antisocial items tended to occur commonly in the 'normal' child.

Firesetting occurred in eight children, seven of whom were conduct disordered, with firesetting part of a socialised conduct disorder - it took the form of setting fire to waste paper bins, post boxes and collections of rubbish outside buildings. One firesetter was suffering from mixed emotional and conduct disorder and he had lit small fires at home. Yanell (1940) stressed the difference between 6-8 year old neurotic firesetters with much latent hostility to parent figures and the more delinquent 11-15 year olds. Our firesetters fall into the delinquent group. 4.3% prevalence for firesetting in this group.

Stealing tended to be associated with conduct disorder. No cases of comfort stealing was reported and no case of stealing unassociated with other antisocial items was reported. This can be explained by the fact that comfort stealing tends to occur in younger children.

No child was reported by his mother to be abusing alcohol, drugs or solvents. This is likely to be due to the young age of children studied and these activities tend to begin around the age of twelve years. Another possibility is that children are engaged in this behaviour unknown to their parents.

Hyperkinetic Syndrome.

2.1% or 4 children were diagnosed as suffering from Hyperkinetic Syndrome, with one child also having developmental delay. This diagnosis was made when overactivity, restlessness, fidgetiness and disinhibition were the most prominent features. This is a slightly higher rate than that found by Rutter in the Isle of Wight study of 10 and 11 year olds. He found only two hyperkinetic children out of a total population of 2199.

There was considerable overlap between items of hyperactivity and antisocial items. This overlap has been noted in other studies.

(Safer and Allen 1976; Cantwell 1978; Barkley 1981). Taylor (1983) using Conners Teachers Rating Scale found that significant hyperactivity was present in 82% of a group of conduct disordered children. We made a

diagnosis of Hyperkinesis in those cases where items of hyperactivity were more prominent than those of conduct disorder. Three children had symptoms of both hyperactivity and conduct disorder. One child had only symptoms of hyperactivity and she also had signs of developmental delay. Stewart et al (1981) used clinically gathered data as the basis for research diagnoses of pure hyperactivity, unsocialised aggression and mixed hyperactivity and aggression. They found that the mixed group quite closely resembled those with unsocialised aggression only. By contrast, the rather small group of children with pure hyperactivity appeared to be a distinct group; they had lower IQs and an earlier age of onset. Our findings support this view.

SUMMARY SECTION THREE

- 3.0 190 children are examined intensively for psychological disorder.
- 3.1 104 children were 'non-deviant' on B2 Questionnaire and 86 were 'deviant' on B2. (Section 2)
- 3.2 62 of these children were found to have a definite psychiatric disorder. This showed the B2 has a 61.6% true positive rate and an 18.3% false negative rate.
- 3.3 Using the above figures the prevalence of Psychiatric Disorder for the total population is estimated to be 25.4%.
- 3.4 11.6% of the 190 children were enuretic, wetting the bed at least once a week.
- 3.5 10.0% of the 190 children had a conduct disorder.
- 3.6 4.7% of the 190 children had an emotional disorder.
- 3.7 4.2% of the 190 children had a mixed conduct and emotional disorder
- 3.8 2.1% of the 190 children were suffering from the Hyperkinetic Syndrome.

SECTION FOUR

Family and Social
Circumstances of Children
with Psychiatric Disorder

SECTION FOUR

SOCIAL FACTORS AFFECTING CHILD PSYCHIATRIC DISORDER

INTRODUCTION.

Rates of child psychiatric disorder are known to vary considerably according to living conditions. Gath et al (1972) found referral rates to child guidance clinic were higher in areas of low social status. Rutter found marked differences in prevalence of psychiatric disorder in different areas. (Rutter et al 1975), with 12.0% of children on The Isle of Wight and 25.4% of children in Inner London showing evidence of psychiatric disorder. Studies on Irish populations have varied from 5% in a group of children from privileged backgrounds to 33% in children from a disadvantaged area of Dublin with psychiatric disorder. (Barton and Fitzgerald 1986)

METHOD.

190 children were chosen from a larger group of 2029 children. Section 2 and 3 describes how these children were chosen. Where available the mother of each child was interviewed in order to assess child psychiatric disorder, to investigate social and family factors, and to assess mothers mental state. The interview to assess the child was explained in Section 3 and mothers assessment is explained in Section 5. The social and family circumstances were assessed using a semi-structured interview which systematically evaluated attitudes or feelings and events or activities in the home. (Clare and Cairns 1978). This Social Interview, which takes about 45 minutes to administer, covers housing, finance, occupation, social and leisure activities and relationships with significant individuals in the persons life.

Table 4.1 FREQUENCY OF ITEMS ON SOCIAL QUESTIONNAIRE

ITEM		FREQUENCY N=185	PERCENT
Accommodation	House	180	97.3%
	Flat	5	2.7%
Tenancy	Owned	124	67.0%
	Rented	61	33.0%
Residential Stability	Adequate	173	91.1%
	Less than adequate	12	8.9%
Kitchen	Adequate	174	94.2%
	Less than Adequate	11	5.8%
Bathroom	Adequate	174	93.7%
	Less than Adequate	11	6.3%
Lavatory	Adequate	170	91.6%
	Less than Adequate	15	8.4%
Heating	Adequate	151	80.5%
	Less than Adequate	34	19.5%
Privacy	Adequate	166	88.4%
	Less than Adequate	19	11.6%
Furniture	Adequate	170	90.5%
	Less than Adequate	15	9.5%

RESULTS.

110 boys and 80 girls were assessed. 5 parents completed child interview but refused to complete social interview, leaving a total of 185 children on whom social and family environments were assessed. 117 fathers were in fulltime employment, 57 were unemployed and 11 were not living at home. 35 of the children were from families of 6 or more children, the remainder were from smaller families.

Table 4.1 shows the frequency of items on the social questionnaire. Two thirds of the group studied lived in private accommodation and one third lived in rented accommodation, predominantly local authority housing. Generally a high level of satisfaction with housing was expressed with only 7.6% severely dissatisfied with housing. Overcrowding was evident in 15.3%; this tended to be caused by single parents sharing the home of their parents. Almost the entire sample possessed a television, half had at least one car and two-thirds had a telephone. As many people declined to disclose the amount they were earning 'Satisfaction with income' was taken to account for overall ability to live on available income. One third expressed marked dissatisfaction with their income.

ITEM		FREQUENCY N=185	PERCENT
Social Contact	Satisfied	139	75.1%
	Minor Dissatisfact	20	10.8%
	Marked Dissatisfact	12	6.5%
	Severe Dissatisfact	14	7.6%
Neighbour Opp	Satisfied	106	57.3%
	Minor Dissatisfact	31	16.8%
	Marked Dissatisfact	34	18.4%
	Severe Dissatisfact	14	7.4%
Neighbour Man	Satisfied	105	56.8%
	Minor Dissatisfact	29	15.7%
	Marked Dissatisfact	35	18.9%
	Severe Dissatisfact	16	8.6%
Neighbour Sat	Satisfied	135	71.1%
	Minor Dissatisfact	18	9.5%
	Marked Dissatisfact	15	8.1%
	Severe Dissatisfact	17	9.2%
Childhood	Satisfied	121	65.4%
	Minor Dissatisfact	17	9.2%
	Marked Dissatisfact	25	13.2%
	Severe Dissatisfact	22	11.9%
Fathers Employment	Always worked	136	77.7%
	Some Unemployment	17	9.7%
	Mostly Unemployed	16	9.1%
	Never Employed	6	3.4%
Relatives Opp	Satisfied	107	57.8%

ITEM		FREQUENCY N=185	PERCENT
Dishwasher	Absent	165	89.4%
	Present	20	10.6%
Spindryer	Absent	121	64.0%
	Present	64	36.0%
Telephone	Absent	74	40.7%
	Present	110	59.7%
Television	Absent	3	3.2%
	Present	182	96.8%
Video	Absent	66	34.9%
	Present	119	65.1%
Car	Absent	92	49.7%
	Present	93	50.0%
Satis /Income	Satisfied	97	52.4%
	Minor Dissatisfact	27	14.6%
	Marked Dissatisfact	25	13.5%
	Severe Dissatisfact	36	19.5%
Leisure Opp	Satisfied	74	40.0%
	Minor Dissatisfact	54	29.2%
	Marked Dissatisfact	28	15.1%
	Severe Dissatisfact	29	15.7%
Leisure Man	Satisfied	80	43.2%
	Minor Dissatisfact	48	25.9%
	Marked Dissatisfact	30	15.8%
	Severe Dissatisfact	27	14.2%
Leisure Sat	Satisfied	105	56.8%
	Minor Dissatisfact	38	20.5%
	Marked Dissatisfact	19	10.0%
	Severe Dissatisfact	23	12.4%
Social Contacts	Satisfied	147	79.5%
	Minor Dissatisfact	11	5.9%
	Marked Dissatisfact	15	8.1%
	Severe Dissatisfact	12	6.5%
Confident (anyone)	Absent	40	22.1%
	Present	141	77.9%
Confident (partner)	Absent	33	17.8%
	Present	152	82.2%

Opp = Opportunity; Man = Management; Sat = Satisfaction;

ITEM	FREQUENCY	PERCENT
	N=185	
Marital Interest Satisfied	120	70.2%
Minor Dissatisfact	15	8.8%
Marked Dissatisfact	13	7.6%
Severe Dissatisfact	23	13.5%
Marital Irritability Satisfied	120	70.2%
Minor Dissatisfact	12	7.0%
Marked Dissatisfact	18	10.5%
Severe Dissatisfact	21	12.3%
Marital Quarrels Satisfied	125	73.1%
Minor Dissatisfact	15	8.8%
Marked Dissatisfact	12	7.0%
Severe Dissatisfact	19	11.1%
Physical Violence None	147	86.0%
Some	6	3.5%
Marked	9	5.3%
Severe	9	5.3%
Responsibility Satisfied	119	70.0%
Minor Dissatisfact	12	7.1%
Marked Dissatisfact	17	8.9%
Severe Dissatisfact	22	11.6%
Sexual Compatability Satisfied	122	64.2%
Minor Dissatisfact	12	7.1%
Marked Dissatisfact	14	8.2%
Severe Dissatisfact	22	11.6%

Marital Satisfaction Satisfied	120	68.2%
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On items of social linkage one third of the mothers were considered to have markedly inadequate opportunity for leisure activities. Only one fifth of the sample were dissatisfied with their leisure activities. 22% reported that they did not confide in their partner and 17.8% had no confiding relationship at all. 14% were dissatisfied with the extent of their social supports. Over a quarter described dissatisfaction with their opportunity for relating to their neighbours, and almost one third managed this relationship poorly despite adequate opportunity; less than a fifth of these women were dissatisfied about this lack of neighbourliness.

Almost one quarter of women described unhappy childhoods, most commonly associated with parental mental illness and marital disharmony. 12.5% of the women's fathers had been unemployed during their childhood. One quarter described marked difficulties in keeping contact with their relatives, the commonest reason given being geographical distance. A slightly smaller number made constructive efforts to keep contact, and one fifth in the total sample described dissatisfaction over their contact with relatives. A very small percentage complained of too much contact with their relatives, the majority finding the opposite.

In all 68.2% were in 'totally satisfactory marriages.' One quarter were markedly dissatisfied. 18% quarrelled frequently. In 10% of marriages there was frequent physical violence. In an objective

assessment of child management, 28% were performing poorly, although only 13% stated they had serious behavioural or emotional problems in children other than the index child. The overall satisfaction on being a parent was very high with only 5% expressing marked dissatisfaction.

Table 4.2, 4.3, and 4.5 shows the relationship between these social and family items and child psychiatric illness. Chi square test of significance has been used to show the association between individual items and child disorder.

In Table 4.2 it is seen that children living with married parents are significantly less likely to be disordered than those whose parents

and a child is twice as likely to be disordered if his father

assessment of child management, 28% were performing poorly, although only 13% stated they had serious behavioural or emotional problems in children other than the index child. The overall satisfaction on being a parent was very high with only 5% expressing marked dissatisfaction.

Table 4.2, 4.3, and 4.5 shows the relationship between these social and family items and child psychiatric illness. Chi square test of significance has been used to show the association between individual items and child disorder.

In Table 4.2 it is seen that children living with married parents are significantly less likely to be disordered than those whose parents are separated. A child is twice as likely to be disordered if his father is unemployed. Those of below average IQ were twice as likely to have a psychiatric disorder, but the association was not significant when all IQ grades were taken into account.

The home environment and material belongings are described in Table 4.3. Tenancy, household care and satisfaction with house are seen to be significantly important factors in child disorders. In those households where there was no telephone the index child was twice as likely to be disordered as a child from a household with a telephone. The same applied to children from households with a car.

Table 4.2

CHILD PSYCHIATRIC ILLNESS AND MATERNAL SOCIAL CIRCUMSTANCES.

Variable	Illness Present	Illness Absent	Chi- Square
Marital Status			
Married	31.8%	68.2%	
Other	71.4%	28.6%	14.18 ****
Employment Status			
Employed	28.2%	71.8%	
Unemployed	52.6%	47.4%	8.87 **
Deviance on B2			
Not Deviant	18.3%	81.7%	
Deviant	61.6%	38.4%	35.78****
Child IQ			
Superior	27.8%	72.2%	
Above Average	34.95	65.1%	
Average	38.9%	61.1%	
Below Average	60.9%	39.1%	6.00 NS
Reading Age			
18mths + ahead	25.6%	74.4%	
Up to 17 mths ahead	17.9%	82.1%	
0 to 17 mths behind	31.8%	68.2%	
18 mths behind	51.9%	48.1%	11.9**

Table 4.3

CHILD PSYCHIATRIC ILLNESS AND MATERNAL SOCIAL CIRCUMSTANCES.

Variable	Illness Present	Illness Absent	Chi- Square
Tenancy			
Owned	25.6%	74.4%	
Rented	62.3%	37.7%	21.62***
Privacy			
Adequate	37.5%	62.5%	
Not Adequate	40.9%	59.1%	0.005 NS
Space Adequacy			
Adequate	34.8%	65.2%	
Inadequate	55.2%	44.8%	3.517 NS
Household Care			
Adequate	33.5%	66.5%	
Less than Adequate	69.6%	30.4%	9.64**
Satisfaction with house			
Satisfied	30.3%	69.7%	
Minor Dissatisfaction	45.5%	54.5%	
Marked Dissatisfaction	50.0%	50.0%	
Severe Dissatisfaction	71.4%	28.6%	11.46**
Telephone			
Absent	53.2%	46.8%	
present	27.1%	72.3%	11.58***
Car			
Absent	54.3%	45.7%	
Present	22.1%	77.9%	19.3*****
Satisfaction as housewife			
Satisfied	28.0%	72.0%	
Minor Dissatisfaction	55.6%	44.4%	
Marked Dissatisfaction	70.6%	29.4%	
Severe Dissatisfaction	66.6%	33.3%	26.84***
Husbands Occupation			
Satisfied	27.6%	77.4%	
Minor Dissatisfaction	26.3%	73.7%	
Marked Dissatisfaction	22.25%	77.8%	
Severe Dissatisfaction	66.7%	33.3%	
Not Applicable	50.6%	49.4%	13.44*

NS = Not Significant

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$;

Table 4.3 (cont.)

CHILD PSYCHIATRIC ILLNESS AND MATERNAL SOCIAL CIRCUMSTANCES.

Variable	Illness Present	Illness Absent	Chi- Square
Unemployment			
Satisfied	44.4%	55.6%	
Minor Dissatisfaction	57.1%	42.9%	
Marked Dissatisfaction	56.3%	43.8%	
Severe Dissatisfaction	20.0%	80.0%	
Not Applicable	33.9%	66.1%	7.066NS
Satisfaction with Income			
Satisfied	26.8%	73.2%	
Minor Dissatisfaction	63.0%	37.0%	
Marked Dissatisfaction	32.0%	68.0%	
Severe Dissatisfaction	72.2%	27.8%	23.43****

NS = Not Significant

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$:

The Mothers' personal satisfaction and their social supports are described in Table 4.4. A child whose mother is satisfied with her leisure activities has a one in four chance of being disturbed, whereas a child whose mother is severely dissatisfied with leisure has a one in two chance of being disturbed. If the mother has no confiding relationship, a child is twice as likely to be disordered as is the case if she is severely dissatisfied with her social contacts. Where the mother's relationships with neighbours and relatives is poor there is a definite tendency for a child to be disordered. However this does not reach statistical significance in either case. The mothers' childhood experiences were no different for the two groups; there is no evidence that mothers unhappy childhood is associated with child disorder.

The marital and parental relationship is recorded in Table 4.5. One fifth of those children whose parents had a satisfactory relationship were found to have a disorder. A child whose parents were dissatisfied was four times as likely to be disordered. Where there was marked dissatisfaction or separation the child was three times as likely to be disordered. Almost ninety percent of children in homes where there was severe physical violence were disordered compared with 30% of those from non-violent homes. Mothers who were handicapped in child management were three and a half times more likely to have a disordered child than those with no such handicap. There was a very significant association

of child disorder with disorder in other siblings and mothers satisfaction as a parent. Children from families where there were 6 or more children were twice as likely to be disordered as those from smaller families. Position in family was not significantly associated with disorder.

Table 4.4

CHILD PSYCHIATRIC ILLNESS AND MATERNAL SOCIAL CIRCUMSTANCES

Variable	Illness Present	Illness Absent	Chi- Square
Leisure Opportunity			
Satisfied	28.4%	71.6%	
Minor Dissatisfaction	33.3%	66.7%	
Marked Dissatisfaction	57.1%	42.9%	
Severe Dissatisfaction	51.7%	48.3%	10.09 *
Leisure Management			
Satisfied	25.0%	75.0%	
Minor Dissatisfaction	45.8%	54.2%	
Marked Dissatisfaction	50.0%	50.0%	
Severe Dissatisfaction	48.1%	51.9%	10.02 *
Leisure Satisfaction			
Satisfied	24.8%	75.2%	
Minor Dissatisfaction	55.3%	44.7%	
Marked Dissatisfaction	52.6%	47.4%	
Severe Dissatisfaction	56.5%	43.5%	17.72 ***
Social contacts Opportunity			
Satisfied	30.6%	69.4%	
Minor Dissatisfaction	72.7%	27.3%	
Marked Dissatisfaction	60.0%	40.0%	
Severe Dissatisfaction	66.7%	33.3%	16.33 **
Confidant (partner)			
Absent	55.0%	45.0%	
Present	32.6%	67.4%	5.73 *
Confidant (anyone)			
Absent	66.7%	33.3%	
Present	31.6%	68.4%	12.73 ***
Satisfaction with social contacts			
Satisfied	30.9%	69.1%	
Minor Dissatisfaction	40.0%	60.0%	
Marked Dissatisfaction	83.3%	16.7%	
Severe Dissatisfaction	64.3%	35.7%	17.58 ***
Neighbourliness opportunity			
Satisfied	37.7%	62.3%	
Minor Dissatisfaction	41.9%	58.1%	
Marked Dissatisfaction	29.4%	70.6%	
Severe Dissatisfaction	50.0%	50.0%	2.13 NS

NS = Not Significant

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$;

Table 4.4 (cont)

CHILD PSYCHIATRIC ILLNESS AND MATERNAL SOCIAL CIRCUMSTANCES

Variable	Illness Present		Illness Absent		Chi- Square
Neighbourliness management					
Satisfied	35.2%		64.8%		
Minor Dissatisfaction	44.8%		55.2%		
Marked Dissatisfaction	34.3%		65.7%		
Severe Dissatisfaction	50.0%		50.0%		2.09 NS
Neighbourliness satisfaction					
Satisfied	33.3%		66.7%		
Minor Dissatisfaction	38.9%		61.1%		
Marked Dissatisfaction	53.3%		46.7%		
Severe Dissatisfaction	58.8%		41.2%		5.88 NS
Domestic Situation					
Satisfied	32.6%		67.4%		
Minor Dissatisfaction	40.0%		60.0%		
Marked Dissatisfaction	45.5%		54.5%		
Severe Dissatisfaction	58.3%		41.7%		6.38 NS
Childhood					
Satisfied	36.4%		63.6%		
Minor Dissatisfaction	35.3%		64.7%		
Marked Dissatisfaction	40.0%		60.0%		
Severe Dissatisfaction	45.5%		54.5%		0.8612 NS
Fathers Employment					
Always employed	37.5%		62.5%		
Some Unemployment	41.2%		58.8%		
Mostly Unemployed	50.0%		50.0%		
Never Unemployed	33.3%		66.7%		1.05 NS

Table 4.5

CHILD PSYCHIATRIC ILLNESS AND MATERNAL SOCIAL CIRCUMSTANCES

Variable	Illness Present	Illness Absent	Chi- Square
Marriage Interest			
Satisfied	24.2%	75.8%	
Minor Dissatisfaction	33.3%	66.7%	
Marked Dissatisfaction	69.2%	30.8%	
Severe Dissatisfaction	73.9%	26.1%	28.18 ****
Marriage Irritability			
Satisfied	23.3%	76.7%	
Minor Dissatisfaction	33.3%	66.7%	
Marked Dissatisfaction	77.8%	22.2%	
Severe Dissatisfaction	66.7%	33.3%	30.89 ****
Marriage Quarrels			
Satisfied	25.6%	74.4%	
Minor Dissatisfaction	60.0%	40.0%	
Marked Dissatisfaction	58.3%	41.7%	
Severe Dissatisfaction	63.2%	36.8%	18.44 ***
Marriage Physical Violence			
None	30.6%	69.4%	
Some	50.0%	50.0%	
Marked	44.4%	55.6%	
Severe	88.9%	11.1%	13.66 **
Marriage Sharing Responsibility.			
Satisfied	23.5%	76.5%	
Minor Dissatisfaction	33.3%	66.7%	
Marked Dissatisfaction	76.5%	23.5%	
Severe Dissatisfaction	68.2%	31.8%	30.27 ****
Marriage Sexual Compatibility			
Satisfied	21.3%	78.7%	
Minor Dissatisfaction	75.0%	25.0%	
Marked Dissatisfaction	57.1%	42.9%	
Severe Dissatisfaction	72.7%	27.3%	35.40 ****
Satisfaction with Family Planning			
Satisfied	26.5%	73.5%	
Minor Dissatisfaction	31.3%	68.8%	
Marked Dissatisfaction	64.7%	35.3%	
Severe Dissatisfaction	70.0%	30.0%	15.77 **
Marital Discord			
Satisfied	20.0%	80.0%	
Minor Dissatisfaction	84.6%	:	
Marked Dissatisfaction	75.0%	2	
Severe Dissatisfaction	60.0%	4	
Separated	64.7%	3	

NS = Not Significant

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$;

Table 4.5 (cont)

CHILD PSYCHIATRIC ILLNESS AND SOCIAL CIRCUMSTANCES

Variable	Illness Present	Illness Absent	Chi- Square
Mothers' Management of children			
Satisfied	20.9%	79.1%	
Minor Dissatisfaction	66.7%	33.3%	
Marked Dissatisfaction	59.3%	40.7%	
Severe Dissatisfaction	72.0%	28.0%	38.10 ****
Problems with other children			
None	24.8%	75.2%	
Some	44.4%	55.6%	
Marked	100.0%	0.0%	
Severe	90.9%	9.1%	44.23 ****
Mothers' Satisfaction as a Parent			
Satisfied	30.0%	70.0%	
Minor Dissatisfaction	72.0%	28.0%	
Marked Dissatisfaction	66.7%	33.3%	
Severe Dissatisfaction	100.0%	0.0%	21.14 ****
School Type			
Disadvantaged + Con	47.5%	52.5%	
Disadvantaged	53.7%	46.3%	
WC + MC	32.5%	67.5%	
MC	18.0%	82.0%	15.53 **
Number of children in Family			
	N		
5 or less	155	31.6%	68.4%
6 or more	35	65.7%	34.3%
			12.69 ***
Position in Family			

Discriminant Analysis.

Before discussing the findings on Discriminant analysis this statistical procedure will be described in some detail. Discriminant analysis is a multivariate analysis which essentially attempts to identify from a range of variables a linear combination of variables which best distinguishes between two categories of cases. As a statistical device discriminant analysis not only selects the variables which best discriminate between the two groups but also provides an estimate of the strength and direction of the discrimination.

'Stepwise discriminant analysis' is used here in which the variables discriminating the two groups are entered in a stepwise progression. An important value at this stage is the Wilks' Lambda statistic. The smaller the value of Wilks' Lambda the greater the discriminating power of a variable or set of variables. The order in which variables are entered into the final discriminating equation is decided by that variable which minimizes the value of Wilks' Lambda, thereby maximising the variance explained by this selected variable and minimising the unexplained variance. This stepwise progression continues until the addition of a further variable will not add anything to the value of the discriminating value. At this stage we have a set of variables which together best discriminate between the two groups. The smaller the value of the final Wilks' Lambda the greater the discriminating power of these combined variables. A canonical correlation value can

be calculated from these combined variables. This operates similarly to 'multiple regression variable' in that the square of the canonical correlation provides the proportion of variance explained by the combined variables selected. Finally the Standard Canonical Discriminant Function is calculated for each variable. This standardises results to make each of the variables directly comparable to one another. This Standard Canonical Discriminant Function shows the relative contribution and direction of effect of the individual variables.

The two categories analysed were children with a psychiatric diagnosis and those without a diagnosis. Variables on the social questionnaire were included in the analysis. Table 4.6 and 4.7 show how these variables correlate with one another. This is of importance in discriminant analysis. If two items correlate highly, and one item is

Table 4.6 shows the correlations of items on the social questionnaire with one another. Summary variables were used in order to reduce the number of variables involved. As only 28 women were not married they were excluded from this analysis. Other women excluded were those on whom information was incomplete. 146 in all were included in this analysis.

Table 4.6 Correlations of Variable on Social Questionnaire (1)

	EmpStat	Income	IncDisat	QualAc	HseAdeq	FamNo	MarDis	RelDis	ParDis
EmpStat	1.00	-.39**	.26*	-.45**	-.33**	.18	.35**	.08	.36**
Income	-.40**	1.00	-.43**	.45**	.28**	.01	-.33**	-.07	-.28**
IncDisat	.26*	-.43**	1.00	-.42**	-.29**	.12	.24*	.05	.17
QualAc	-.45**	.45**	-.42**	1.00	.82**	-.32**	-.36**	-.11	-.40**
HseAdeq	-.33**	.28**	-.21**	.82**	1.00	-.39**	-.34**	-.10	-.32**
FamNo	.18	.01	.12	-.36**	-.39**	1.00	.15	.02	.23*
MarDis	.35**	-.33**	.24*	-.36**	-.34**	.15	1.00	.37**	.73**
RelDis	.09	-.06	.05	-.10	-.10	.02	.36**	1.00	.30**
ParDis	.36**	-.28**	.17	-.40**	-.32**	.23*	.73**	.30**	1.00

N = 146 2-tailed significance; * = .01 ** = .001
 EmpStat = Employment Status; IncDisat = Dissatisfaction with income,
 QualAcc = Summary value of accommodation variables.
 HseAdeq = Summary value of household variables.
 FamNO = Family Number.
 MarDis = Marital Dissatisfaction. Summary Value of all marriage variables.
 RelDis = Relative Dissatisfaction. Summary value of items on Relatives.
 ParDis = Parental Dissatisfaction. Summary value of handicaps to child management, problems with other children and satisfaction as a parent.

Table 4.7 Correlations of Variable on Social Questionnaire (2)

	Leisure	AvalConf	SexChld	TotB2	MatPsych	ChldPsych
Empstat	.22*	-.12	.16	.15	.01	.22*
Income	.34**	.11	.04	.30**	.19	-.22*
IncDisat	.51**	.02	.01	.11	.20	.20
QualAc	-.32**	.03	-.02	-.20	-.17	-.30**
HseAdeq	-.22	.08	.02	-.14	-.17	-.32**
FamNo	.09	-.11	-.06	.14	.05	.28**
MarDis	.27**	-.33**	.03	.22*	.23*	.44**
RelDis	.24*	-.25*	-.02	.06	.23*	.10
Pardis	.25*	-.34**	-.03	.33**	.32**	.48**
Leisure	1.00	-.19	-.11	.18	.31**	.14
AvalConf	-.19	1.00	.06	-.13	-.14	-.16
Sex	-.11	.06	1.00	-.22*	-.05	-.18
TotB2	.18	-.13	-.22*	1.00	.17	.46**
MatPsych	.31**	-.14	-.05	.17	1.00	.24*
ChldPsych						

Fifteen variables were included in the analysis. In some cases summary variables are used and these have been explained in Table 4.6 and 4.7. 28 mothers who were not married at the time of the study were excluded from the analysis. 28 were excluded as at least one discriminating variable was missing. (Some mothers declined to answer selected questions.) 129 were included in the analysis.

Table 4.8 A

Variables included in Discriminating Table.

Step	Variable entered	Wilk's Lambda	Significance.
1.	Parental Dissatisfaction	.88	.0001
2.	ReadPct	.84	.0000
3	FamNo	.82	.0000
4.	Sex	.80	.0000
5.	HseDisat	.77	.0000
6.	Patage	.75	.0000
7.	IQ Tot	.74	.0000

ReadPct = Reading Percentile(child); FamNo = Number of Children;
 HseDisat = Mother's Dissatisfaction as a Housewife;
 Patage = Child's Fathers Age;
 IQ Tot = Child's score on Ravens Progressive Matrices.

Table 4.9 A Summary Results of Stepwise Discriminant Analysis

Variables	Standard Canonical Discriminant Function
Employment Status	-
Income	-
Quality of Accommodation	-
Standard of Living	-
Maternal Age	-
Paternal Age	.32
Family Number	.48
Position in Family	-
Sex	.40
Parental Dissatisfaction	.60
Dissatisfaction as a Housewife	.24

Table 4.9A shows that an equation based on seven variables maximally distinguishes between children who are psychiatrically disordered and those who are not, and knowing the results of these variables we would correctly classify 72% of cases into those who are disordered and who are not. The canonical correlation of .5 shows that 25% of the variance between the two groups can be explained by these six variables. This difference is significant at the 0.1% level.

Examination of the Standard Discriminant Function Coefficients show that, in order of importance, those most likely to have a psychiatric diagnosis are;

- (i) those children whose mothers score highly on Dissatisfaction as a Parent. This is a summary variable of situational handicaps to child rearing, problems with children other than the index child and dissatisfaction as a parent.
- (ii) those children who obtained a low Reading Percentage score.
- (iii) those children who were from families of 5 or more children.
- (iv) Boys.
- (v) those children whose mothers were dissatisfied in their role as a housewife.
- (vi) those children whose fathers were older
- (v) those children who obtained a low score on IQ testing.

Parental Dissatisfaction and Marital Dissatisfaction are highly correlated ($r = .73$). If both are included in the same analysis the discriminating power of one would be cancelled out by the other and only one would appear in the final equation. As both variables have been shown to be highly significantly associated with Child Psychiatric Disorder, two analyses have been performed, using these variables separately. A second discriminant analysis was performed using the same variables as above, but substituting Marital Discord for Parental Dissatisfaction. Results obtained are shown in Tables 4.8B and 4.9B

Table 4.8B

Variables included in Discriminating Equation.

Table 4.9 B Summary Results of Stepwise Discriminant Analysis

Variables	Standard Canonical Discriminant Function	
Employment Status	-	
Income	-	
Quality of Accommodation	-	
Standard of Living	-	
Maternal Age	-	
Paternal Age	-	
Family Number	.44	
Position in Family	-	
Sex	.41	
Marital Dissatisfaction	.68	
Dissatisfaction as a Housewife	.35	
School Type	-	
Reading Percentile	-.42	
IQ Total	-.33	
Malaise Result (Mother's mental Health)	-	
Canonical Correlation	.53	
Wilks' Lambda	.72	
Chi-Squared	41.56	p < 0.001
% Classified correctly	Diagnosis	78%
% Classified correctly	No diagnosis	82%
Classified correctly	Total	80%

Table 4.9 B shows that Marital discord is the most important factor in discriminating between disordered and non-disordered children. As was shown in the previous analysis those children with low IQ and Reading difficulties are more likely to be affected by environmental stresses.

Including Marital Discord in the variables available for selection provides a more robust equation than that obtained by including Parental Dissatisfaction. This is manifested by the higher value of the canonical correlation, showing that 30% of the variance between the two groups is explained by these six variables.

DISCUSSION.

As was stated in the introduction numerous studies have established that child psychiatric illness is found more commonly where there is social disadvantage, parental mental illness and marital disharmony. This study confirms these findings. In this discussion we will analyse individual social circumstances and speculate as to how they are related to child psychiatric disturbance directly and through their role in contributing to maternal depression.

The finding that children are twice as likely to be disordered if they are living in a situation other than with married parents is likely to be related to the fact that this situation would have followed on a period of considerable marital disharmony leading to eventual separation. It also highlights the difficulties involved in rearing children as a single parent. A child whose father was unemployed was twice as likely to be disordered as a child whose father was employed. This may simply be a reflection of low income and its related effects which are discussed later in the text. Many mothers reported unemployment leading to disillusionment and poor self-esteem in their husbands. Lack of money and useful occupation led to increased tension in the home which may have contributed to marital disharmony. Poor self-esteem in the father may have left him undermined in his parental role and may lead to inconsistencies in parenting.

The association with IQ and disorder is interesting. Although no significant association is found, it can be seen that there is a trend for those scoring higher on IQ testing to be less likely to be disordered. It is likely that children with higher IQs are better able to cope with adversities in their environment. They are also more likely to succeed in school. Satisfactory school performance has been shown to be associated with a greater degree of adjustment. (Quinton and Rutter 1984). It has also been shown that children with lower IQ are more likely to live in disadvantaged areas. This also correlates with a higher rate of psychological disorder. Reading Age is also associated with psychological disorder. Those reading 18mths behind the norm are twice as likely to be disordered than those reading 18 months ahead. The suggested reasons for this association are similar to those for IQ. Both reading and IQ

Where a car or telephone was absent a child was twice as likely to be disordered. For mothers at home with children the telephone facilitates contact with adult support. Apart from the convenience afforded, it may help to lessen the likelihood of mothers becoming socially isolated. It has been shown that increased social support is associated with protection against depression. It can be speculated that the presence of a telephone, protects mothers against depression, thereby leading to improved parenting, and in turn contributing to less child psychopathology.

Women fitting the 'Advantaged' description women tend to be more cohesive than women living in more disadvantaged areas. They tend to have more money which gives access to cars, telephones, and babysitters. These in turn make it possible for them to spend more time away from children, and allows them time for themselves. This would appear to have the effect of reducing depression and improving parenting.

As is seen in Section 5, the depression referred to in this study is not focussed on genetically determined depression but is focussed on a sociological model. Brown et al (1975) have commented that mothers are more vulnerable to depression if they are at home with children and have poor social supports. Our findings would indicate that those mothers whose social supports are poor are twice as likely to have children with a psychological disorder. Living in a large housing estate is no protection against social isolation. Many women felt unwanted in their

neighbourhood. This feeling seemed to reduce self-esteem and lead to poorer management of their relationship with neighbours. With respect to leisure activities and social contacts, those with low income reported having reduced opportunity for social outlets. It was also found that they tended to manage any opportunity poorly and they did not consciously plan their leisure time. Many were caught in a stressful situation: having insufficient money for food and clothing; the continued feeling of lack of control over their lives and in many cases total dissatisfaction with their lives. Women fitting the 'advantaged' description displayed a 'planful competence' in their lives. They were aware that they needed time for themselves away from the home and made a conscious effort to break from being 'housebound housewives'.

It has been seen that those living in rented local authority accommodation tended to be twice as likely to have disturbed children.

A surprising finding has been the lack of association between mothers childhood unhappiness and child disorder. Other studies have shown that those who have poor parenting themselves tend to have difficulties with parenting. (Quinton and Rutter 1988). This lack of association may be due to faulty retrospective recall and women may idealise their childhood. Brown (1988) has recently reported that present circumstances appear to be more important than past experiences. In a study of mothers in Islington he found that women who had unhappy childhoods were more likely to have early unplanned pregnancies and unsatisfactory marriages. However those who had successful marriages and social supports in adult lives tended to be successful parents and were unlikely to suffer from depression. It may be that those women in our study who were in satisfactory relationships at present were less likely to be affected by unhappy childhoods.

The fact that two thirds of women reported total satisfaction with their marriage is interesting. In countries other than Ireland it is found that one third of marriages end in divorce, our findings would show that one third of our group were in unhappy marriages. Overall marital disharmony leads to increased irritability in the home, parents tend to have less shared interests and are less likely to operate as one unit. This tends to lead to inconsistent parenting, parents quarrelling with each other often scapegoat the children. The child who is exposed to marital violence in the home has a 90% chance of being disordered, this could be due to modelling of parental behaviour along with the

other effects of parents quarreling. Parental disharmony leads to frightening situations in the home leading to insecurity and reduced self-esteem in the child. A poor marital relationship is more likely to lead to maternal depression and this in turn leads to greater parenting difficulties and higher rate of child disorder.

These results concur with the findings in clinical practice of the authors. Children whose mothers are depressed, in unsatisfactory marriages and living in conditions of social deprivation and social isolation are more likely to be disordered. Those children who appear to be most at risk within these situations are - boys; children from larger families and children who score poorly on tests of Reading attainment and IQ assessment.

The increased vulnerability of those children who score poorly on tests of IQ and Reading attainment emphasises the need for greater liaison between the school and home. The Department of Education's Home/School Liaison Programme is most important in this regard and we welcome recent promises for its extension. We would also stress the need for a greater number of Educational Psychologists. These psychologists would be best employed working part-time in schools and part-time in Child and Family Centres.

The vulnerability of those children who perform poorly on formal tests also underlines that teachers and parents should make every effort to boost children's self-esteem through praise and providing them with the opportunities for successful experiences whether this is in academic, sporting or recreational activities.

SUMMARY SECTION FOUR

4.0 The Social and Family Circumstances of 190 Children are examined.

4.1 62 of the Children have a Psychiatric Disorder.

4.2 Child Psychiatric Disorder is associated with mothers social
isolation.

4.3 Child Psychiatric Disorder is associated with Parental Disharmony.

4.4 Children whose mothers are depressed are more likely to be
disordered.

SECTION FIVE

A Psychosocial Study
of 190 Mothers

SECTION FIVE

DEPRESSION IN WOMEN

This study looks at the mental health of a group of women in Dublin, their social circumstances and the relationship between both.

INTRODUCTION

Depressive disorders account for more admissions to psychiatric hospitals than any other diagnosis. (O'Connor and Walsh 1986.) More women than men are affected by depression and this seems to be true for both treated and community populations.

Brown et al in their Camberwell study found the incidence of depression among working class women to be 40%. They claimed that depressive conditions are often the result of aetiological factors of a directly sociological nature. Shepherd et al found that many mothers attending child guidance clinic saw themselves as suffering from depression and "nerves". In Irish studies Leader found 50% of mothers of pre-school children to be depressed, McNestry et al found 44% of mothers attending a child guidance clinic to be depressed. These Irish studies have concentrated on a population that presented with a problem; i.e child attending child guidance clinic. This present study investigates mothers of children in the community. Prevalence rates of depression in women tends to vary, depending on the age group of the women studied, their marital status and environmental influences. The incidence of depression among married women is higher than among single women, (Radloff, 1975) while divorced and separated women have the highest rates. (Hallstrom, 1973). This study looks at womens social environment, social supports and relationships and discusses the influences these have on depression.

METHOD

The group studied were chosen as part of a larger study on children. All fourth class pupils in schools in one area of Dublin were screened for psychological deviance. A smaller group of children were selected following this screening to include 103 children identified as 'deviant' and 104 as 'non deviant' children provided the control group. The mothers of these children were interviewed in detail in order to ascertain the presence or absence of psychiatric illness in the child, to obtain data on family and social circumstances and also to assess the mother's mental health. In this part of the study the focus is on the mother's mental health; assessment of child illness will not be described.

The mothers mental state was assessed using the *Clinical Psychiatric Interview*. This is a standardised semi-structured inventory designed for use in community surveys and in general practice. It is divided into four sections, the first is unstructured and consists of sub headings for brief recordings of the patients present and past medical history. Part two is more detailed and systematically enquires about any psychiatric symptoms which the patient may have experienced during the previous week. The third part of the schedule is unstructured and permits the interviewer to collect just enough information about the patients personal family history as may be deemed necessary to assist her to make a diagnosis. The final section permits the interviewer to record abnormalities observed during the interview on twelve five point scales. The ratings represent the doctor's views of 'manifest abnormalities' that she has observed at interview, as distinct from the patient's symptoms which were already rated in the second part of the interview. The strength of the standardised psychiatric assessment lies in its reliability. The overall reliability co-efficient, derived from the analysis of variance is 0.92 (Goldberg and Blackwell, 1970).

Each women also completed the *Malaise Inventory*. This is a twenty four item YES/NO scale which asks questions an different aspects of health and emotion. Five or more affirmative answers are taken as indicative of psychological disorder, in the absence of known physical illness.

Each interview, including the section on child psychiatric state

which was used to make a diagnosis, took two to three hours. All interviews were completed by the same interviewer, a psychiatrist who was trained in the use of the interview schedules. Several interviews were observed and rated independently by a second psychiatrist in order to rate interviewer reliability.

In order to examine the association between depression in women and social and family characteristics the Chi-Squared test of significance is used. Discriminant analysis has been used to select the variables which best differentiate depressed women from non depressed women. Stepwise discriminant analysis was used in which variables differentiating the two groups are entered in a stepwise progression, the largest discriminative being entered first. The relevant statistic in these calculation is the Wilk's Lambda. The larger the value of this statistic the smaller the amount of discriminating power is present in

RESULTS.

The women came from an area of Dublin which included privately owned and local authority housing. The area includes a cross section of all social classes and is quite typical of other urban areas.

185 mothers were assessed. Ages ranged from 27 years to 59 years, with 90% aged between 30 and 42 years. They all had a child in fourth class in primary school. Most women had two to five children but a number had larger families. Table 5.1

Table 5.1

NUMBER OF CHILDREN OF THE WOMEN STUDIED.

No. of children	Frequency	Valid Percent	Cum. Percent
		1.6%	1.6%
1	3	21.1%	23.2%
2	40	23.2%	46.5%
3	43	23.8%	70.3%
4	44	15.3%	85.9%
5	29	5.8%	91.9%
6	11	2.2%	94.1%
7	4	4.2%	98.4%
9	8	1.1%	99.5%
10	2	0.5%	100.0%
11	1		

157 women were married and living with their spouses, the remaining 28 were widowed or separated. One woman was never married. Table 5.2 shows the material circumstances of the women. The majority lived in houses which they rated as being adequate. 15.3% were rated to be living in overcrowded situations, this was caused by an elderly parent living with them or in 22 cases by a grandchild living in the home.

33.0% of the group live in rented accommodation, most of which was local authority owned. 40% had no telephone and 49% had no car. There was considerable overlap between these two items. 14.7% (27) worked parttime and 5.3% (10) worked fulltime. 67% had spouses who were employed and the remainder were living on social welfare assistance. 52.5% reported that they were satisfied with their income.

Table 5.2

FREQUENCY OF ITEMS ON SOCIAL QUESTIONNAIRE
(material circumstances)

ITEM		FREQUENCY N=185	PERCENT
Accommodation	House	180	97.3%
	Flat	5	2.7%
Tenancy	Owned	124	67.0%
	Rented	61	33.0%
Residential Stability	Adequate	173	91.1%
	Less than adequate	12	8.9%
Kitchen	Adequate	174	94.2%
	Less than Adequate	11	5.8%
Bathroom	Adequate	174	93.7%
	Less than Adequate	11	6.3%
Lavatory	Adequate	170	91.6%
	Less than Adequate	15	8.4%
Heating	Adequate	151	80.5%
	Less than Adequate	34	19.5%
Privacy	Adequate	166	88.4%
	Less than Adequate	19	11.6%
Furniture	Adequate	170	90.5%
	Less than Adequate	15	9.5%
Space	Adequate	158	84.7%
	Less than Adequate	27	15.3%
Care /house	Adequate	165	87.9%
	Less than Adequate	20	12.1%
Satis /house	Satisfied	122	65.9%
	Minor Dissatisfact	33	17.8%
	Marked Dissatisfact	16	8.6%
	Severe Dissatisfact	14	7.6%
Vacuum	Absent	18	10.1%
	Present	167	89.9%
Washing Mach	Absent	5	2.6%
	Present	180	97.4%
Fridge	Absent	1	0.5%
	Present	184	99.5%
Cooker	Absent	1	0.5%
	Present	184	99.5%

Table 5.2(cont.)

ITEM		FREQUENCY	PERCENT
		N=185	
Dishwasher	Absent	165	89.4%
	Present	20	10.6%
Spindryer	Absent	121	64.0%
	Present	64	36.0%
Telephone	Absent	74	40.7%
	Present	110	59.7%
Television	Absent	3	3.2%
	Present	182	96.8%
Video	Absent	66	34.9%
	Present	119	65.1%
Car	Absent	92	49.7%
	Present	93	50.0%
Satis /Income	Satisfied	97	52.4%
	Minor Dissatisfact	27	14.6%
	Marked Dissatisfact	25	13.5%
	Severe Dissatisfact	36	19.5%

Table 5.3

Leisure Opp	Satisfied	74	40.0%
	Minor Dissatisfact	54	29.2%
	Marked Dissatisfact	28	15.1%
	Severe Dissatisfact	29	15.7%
Leisure Man	Satisfied	80	43.2%
	Minor Dissatisfact	48	25.9%
	Marked Dissatisfact	30	15.8%
	Severe Dissatisfact	27	14.2%
Leisure Sat	Satisfied	105	56.8%
	Minor Dissatisfact	38	20.5%
	Marked Dissatisfact	19	10.0%
	Severe Dissatisfact	23	12.4%
Social Contacts	Satisfied	147	79.5%
	Minor Dissatisfact	11	5.9%
	Marked Dissatisfact	15	8.1%
	Severe Dissatisfact	12	6.5%
Confidant (anyone)	Absent	40	22.1%
	Present	141	77.9%
Confidant (partner)	Absent	33	17.8%
	Present	152	82.2%
Social Contact	Satisfied	139	75.1%
	Minor Dissatisfact	20	10.8%
	Marked Dissatisfact	12	6.5%
	Severe Dissatisfact	14	7.6%
Neighbour Opp	Satisfied	106	57.3%
	Minor Dissatisfact	31	16.8%
	Marked Dissatisfact	34	18.4%
	Severe Dissatisfact	14	7.4%
Neighbour Man	Satisfied	105	56.8%
	Minor Dissatisfact	29	15.7%
	Marked Dissatisfact	35	18.9%
	Severe Dissatisfact	16	8.6%
Neighbour Sat	Satisfied	135	71.1%
	Minor Dissatisfact	18	9.5%
	Marked Dissatisfact	15	8.1%
	Severe Dissatisfact	17	9.2%

Opp = Opportunity; Man = Management; Sat = Satisfaction;

Table 5.3(cont.)

ITEM		FREQUENCY N=185	PERCENT
Childhood	Satisfied	121	65.4%
	Minor Dissatisfact	17	9.2%
	Marked Dissatisfact	25	13.2%
	Severe Dissatisfact	22	11.9%
Fathers Employment	Always worked	136	77.7%
	Some Unemployment	17	9.7%
	Mostly Unemployed	16	9.1%
	Never Employed	6	3.4%
Relatives Opp	Satisfied	107	57.8%
	Minor Dissatisfact	31	16.8%
	Marked Dissatisfact	29	15.7%
	Severe Dissatisfact	18	9.7%
Relatives Man	Satisfied	109	58.9%
	Minor Dissatisfact	34	18.4%
	Marked Dissatisfact	29	15.7%
	Severe Dissatisfact	13	7.0%
Relatives Sat	Satisfied	126	68.1%
	Minor Dissatisfact	22	11.9%
	Marked Dissatisfact	23	12.4%
	Severe Dissatisfact	14	7.6%

Table 5.4
ITEM

		FREQUENCY N=185	PERCENT
Marital Interest	Satisfied	120	70.2%
	Minor Dissatisfact	15	8.8%
	Marked Dissatisfact	13	7.6%
	Severe Dissatisfact	23	13.5%
Marital Irritability	Satisfied	120	70.2%
	Minor Dissatisfact	12	7.0%
	Marked Dissatisfact	18	10.5%
	Severe Dissatisfact	21	12.3%
Marital Quarrels	Satisfied	125	73.1%
	Minor Dissatisfact	15	8.8%
	Marked Dissatisfact	12	7.0%
	Severe Dissatisfact	19	11.1%
Physical Violence	None	147	86.0%
	Some	6	3.5%
	Marked	9	5.3%
	Severe	9	5.3%
Responsibility	Satisfied	119	70.0%
	Minor Dissatisfact	12	7.1%
	Marked Dissatisfact	17	8.9%
	Severe Dissatisfact	22	11.6%
Sexual Compatability	Satisfied	122	64.2%
	Minor Dissatisfact	12	7.1%
	Marked Dissatisfact	14	8.2%
	Severe Dissatisfact	22	11.6%
Marital Satisfaction	Satisfied	120	68.2%
	Minor Dissatisfact	13	7.4%
	Marked Dissatisfact	16	9.1%
	Severe Dissatisfact	10	5.7%
Management of children	Satisfied	115	62.2%
	Minor Dissatisfact	18	9.7%
	Marked Dissatisfact	27	14.6%
	Severe Dissatisfact	25	13.5%
Problems/other child	None	125	67.6%
	Some	36	19.5%
	Marked	13	7.0%
	Severe	11	5.9%
Satis. as parent	Satisfied	150	81.1%
	Minor Dissatisfact	25	13.5%
	Marked Dissatisfact	9	4.9%
	Severe Dissatisfact	1	0.5%

Opp = Opportunity; Man = Management; Sat = Satisfaction;

Ratings of the opportunity, management and satisfaction of leisure activities and social network is shown in Table 5.3. 22% reported having no regular confidant and 7.6% reported severe dissatisfaction with their social contacts. 65% reported having happy childhood with 11.9% having very unhappy childhoods. 77% had fathers who were always employed. A low proportion had fathers who had never been employed.

Table 5.4A

MATERNAL DEPRESSION AND SIGNIFICANT ASSOCIATIONS

<u>VARIABLE</u>	<u>DEPRESSION PRESENT</u>	<u>DEPRESSION ABSENT</u>	<u>CHI SQUARE</u>
Married	28%	72%	
Other	60.7%	39.3%	10.057 **
Employed	25.6%	74.4%	
Unemployed	42.6%	57.4%	4.203 *
Child deviant on B2	25.2%	74.8%	
Not deviant on B2	42.7%	57.3%	5.518 *
Child psych disorder	52.9%	47.1%	
No psych disorder	20.9%	79.1%	18.72418 ****
Child IQ			
Grade 1	5.6%	94.4%	
Grade 2	32.3%	67.7%	
Grade 3	36.6%	63.4%	
Grade 4	45.5%	54.5%	8.117 *
Child Reading			
18 mths + ahead	17.9%	82.1%	
Up to 17 mths ahead	14.3%	85.7%	
0 to 17 mths behind	47.7%	52.3%	
18 mths behind	32.7%	67.3%	12.738 **

NS = Not Significant

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$;

When assessed with the Clinical Interview 61 women were found to be suffering from a psychiatric disorder. 13 (6.8%) were suffering from endogenous depression, 16 from anxiety and depression, 24 from reactive depression, 3 were suffering from abnormal grief reactions, 3 from alcoholism and two had personality disorders. As all of these had marked depressive symptoms they were included in the analysis of results. In order to examine the association between depression in women and social and family characteristics the Chi-Squared test of significance is used. Table 5.5 indicates the association between material environment and depression. Satisfaction with housing was significantly associated with mental health. The absence of a telephone or car was significantly associated with depression. Those whose partners were unemployed were more likely to be depressed. However, husbands' satisfaction with his occupation or unemployment had no

Table 5.5

MATERNAL DEPRESSION AND SIGNIFICANT ASSOCIATIONS

VARIABLE	MAT. DEP. PRESENT	MAT. DEP. ABSENT	CHI-SQUARE
Income			
Satisfied	21.6%	78.4%	
Minor dissatisfaction	29.6%	70.4%	
Marked dissatisfaction	16.0%	84.2%	
Severe dissatisfaction	77.8%	22.2%	41.722 ****
Leisure opportunity			
Satisfied	20.3%	79.7%	
Minor dissatisfaction	16.6%	83.3%	
Marked dissatisfaction	53.6%	46.4%	
Severe dissatisfaction	75.9%	24.1%	41.41 ****
Leisure management			
Satisfied	16.3%	83.8%	
Minor dissatisfaction	29.2%	70.3%	
Marked dissatisfaction	46.7%	53.3%	
Severe dissatisfaction	74.1%	25.9%	33.62 ****
Leisure Satisfaction			
Satisfied	15.2%	84.8%	
Minor dissatisfaction	42.1%	57.9%	
Marked dissatisfaction	42.1%	57.9%	
Severe dissatisfaction	91.3%	8.7%	52.50 ****
Social Contacts opportunity			
Satisfied	21.8%	78.2%	
Minor dissatisfaction	72.7%	27.3%	
Marked dissatisfaction	66.7%	33.3%	
Severe dissatisfaction	91.7%	8.3%	42.62****
Confidant (partner)			
Absent	60.0%	40.0%	
Present	25.5%	74.5%	15.18****
Confidant (anyone)			
Absent	63.6%	36.4%	
Present	26.3%	73.7%	15.44 ****
Satisfaction with social contacts			
Satisfied	20.1%	79.9%	
Minor dissatisfaction	45.0%	55.0%	
Marked dissatisfaction	83.3%	16.7%	
Severe dissatisfaction	100.0%	0.0%	53.89****

NS = Not Significant

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$;

Table 5.5 MATERNAL DEPRESSION AND SIGNIFICANT ASSOCIATIONS				
VARIABLE	DEPRESSION PRESENT	DEPRESSION ABSENT	CHI SQUARE	
Accommodation				
Adequate	32.2%	67.8%		
Not Adequate	60.0%	40.0%	0.67412	NS
Tenancy of home				
Owned	25.0%	75.0%		
Rented	49.2%	50.8%	9.750	**
Privacy of home				
Adequate	29.8%	70.2%		
Not Adequate	64.7%	35.3%	7.022	**
Household Care				
Adequate	29.9%	70.1%		
Not adequate	61.1%	38.9%	5.803	*
Housing				
Satisfied	21.3%	78.7%		
Minor dissatisfaction	48.5%	51.5%		
Marked dissatisfaction	43.8%	56.3%		
Severe dissatisfaction	85.7%	14.3%	29.561	****
Telephone				
Absent	49.4%	50.6%		
Present	21.3%	78.7%	14.764	***
Car				
Absent	41.5%	58.5%		
Present	24.2%	75.8%	5.512	*

Table 5.5(cont)

MATERNAL DEPRESSION AND SIGNIFICANT ASSOCIATIONS

VARIABLE	MAT. DEP. PRESENT	MAT. DEP. ABSENT	CHI-SQUARE
Neighbourliness opportunity			
Satisfied	25.5%	74.5%	
Minor dissatisfaction	25.8%	74.2%	
Marked dissatisfaction	44.1%	55.9%	
Severe dissatisfaction	78.9%	21.1%	18.50 ***
Neighbourliness management			
Satisfied	23.8%	76.2%	
Minor dissatisfaction	31.0%	69.0%	
Marked dissatisfaction	42.9%	57.1%	
Severe dissatisfaction	75.0%	25.0%	18.37 ***
Neighbourliness satisfaction			
Satisfied	25.2%	74.8%	
Minor dissatisfaction	27.8%	72.2%	
Marked dissatisfaction	53.3%	46.7%	
Severe dissatisfaction	82.4%	17.6%	25.49 ****
Childhood Experience			
Satisfied	27.3%	72.7%	
Minor dissatisfaction	41.2%	58.8%	
Marked dissatisfaction	44.0%	56.0%	
Severe dissatisfaction	45.4%	54.6%	5.222 NS
Mothers' Fathers Employment			
Always employed	28.7%	71.3%	
some unemployment	29.4%	70.6%	
mostly unemployed	62.5%	37.5%	
never employed	33.3%	66.7%	7.58 NS
Relatives contact opportunity			
Satisfied	22.4%	77.6%	
Minor dissatisfaction	29.0%	71.0%	
Marked dissatisfaction	48.3%	51.7%	
Severe dissatisfaction	77.8%	22.2%	25.02****
Relatives contact management			
Satisfied	22.0%	78.0%	
Minor dissatisfaction	35.5%	64.7%	
Marked dissatisfaction	62.1%	37.9%	
Severe dissatisfaction	53.8%	46.2%	19.67 ***
Relatives contact satisfaction			
Satisfied	22.2%	77.8%	
Minor dissatisfaction	40.9%	59.1%	
Marked dissatisfaction	56.5%	43.5%	
Severe dissatisfaction	78.6%	21.4%	26.16 ****

NS = Not Significant

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$;

When social network is assessed, a most interesting picture emerges. Table 5.6 shows that lack of opportunity, poor management and dissatisfaction with all social outlets is significantly associated with depression. 75% of women who never had time with friends or at hobbies were depressed compared with 20% of women who had ample opportunity for leisure pursuits. 91% of women who were severely dissatisfied with their leisure activities were depressed compared with only 15% who expressed total satisfaction with their leisure activities. 63% of those with no confidant were depressed compared with 26% of those with a confidant. All the women who were severely dissatisfied with their social contacts were depressed, while only 20% of those totally satisfied with social contacts were depressed.

The association between poor neighbourliness and depression is significant, with the woman's satisfaction with

Table 5.6

MATERNAL DEPRESSION AND SIGNIFICANT ASSOCIATIONS

VARIABLE	MAT. DEP. PRESENT	MAT. DEP. ABSENT	CHI-SQUARE
Marriage Interests			
Satisfied	22.5%	77.5%	
Minor dissatisfaction	33.3%	66.7%	
Marked dissatisfaction	46.2%	53.8%	
Severe dissatisfaction	65.2%	34.8%	18.07***
Marriage Irritability			
Satisfied	20.8%	79.2%	
Minor dissatisfaction	41.7%	58.3%	
Marked dissatisfaction	38.9%	61.1%	
Severe dissatisfaction	76.2%	23.8%	27.02 ****
Marriage Quarrels			
Satisfied	24.0%	76.0%	
Minor dissatisfaction	33.3%	66.7%	
Marked dissatisfaction	50.0%	50.0%	
Severe dissatisfaction	63.2%	36.8%	14.11 **
Marriage Physical Violence			
None	26.5%	73.5%	
Some	50.0%	50.0%	
Marked	44.4%	55.6%	
Severe	22.2%	77.8%	12.35***
Marriage Sharing of Responsibility			
Satisfied	21.0%	79.0%	
Minor dissatisfaction	41.7%	58.3%	
Marked dissatisfaction	41.2%	58.8%	
Severe dissatisfaction	72.7%	27.3%	24.84 ****
Marriage Sexual Compatibility			
Satisfied	23.8%	76.2%	
Minor dissatisfaction	16.7%	83.3%	
Marked dissatisfaction	50.0%	50.0%	
Severe dissatisfaction	63.6%	36.4%	17.56 ***
Marriage Family Planning			
Satisfied	26.5%	73.5%	
Minor dissatisfaction	31.3%	68.8%	
Marked dissatisfaction	29.4%	70.6%	
Severe dissatisfaction	70.0%	30.0%	8.25 *
Summary Marital Discord			
Satisfied	20.8%	79.7%	
Minor dissatisfaction	53.8%	46.2%	
Marked dissatisfaction	43.8%	56.3%	
Severe dissatisfaction	80.0%	20.0%	24.82****

NS = Not Significant

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$;

Table 5.6(cont)

MATERNAL DEPRESSION AND SIGNIFICANT ASSOCIATIONS

VARIABLE	MAT. DEP. PRESENT	MAT. DEP. ABSENT	CHI-SQUARE
Management of children			
Satisfied	16.5%	83.5%	
Minor dissatisfaction	66.7%	33.3%	
Marked dissatisfaction	51.9%	48.1%	
Severe dissatisfaction	64.0%	36.0%	38.57****
Problem with other children			
None	20.0%	80.0%	
Some	47.2%	52.8%	
Marked	84.6%	15.4%	
Severe	72.7%	27.3%	36.37****
Satisfaction as parent			
Satisfied	26.0%	73.0%	
Minor dissatisfaction	48.0%	52.0%	
Marked dissatisfaction	0.0%	100.0%	
Severe dissatisfaction	0.0%	100.0%	26.18****
Number of children			
5 or less	31.6%	68.4%	
6 or more	39.4%	60.6%	0.44 NS

NS = Not Significant

****, *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$;

Marital and Family Relationships.

No significant association was found between family size and maternal psychiatric illness. Those with 5 children or less were as likely to suffer from depression as those with 6 children or more. Table 5.6 shows that all aspects of marital disharmony are associated with depression. Using a summary rating, 80% of those with severe marital disharmony were depressed compared with 20% of those with satisfactory marital relationship.

Situational handicaps to child management, the presence of serious difficulties in children other than the index child, and dissatisfaction as a parent, were highly significantly associated with depression.

The Malaise Health Questionnaire is a 24 item self rated questionnaire that covers aspects of physical and emotional state. It consists of 24 items with Yes/No answers. Of the 185 women studied 115 scored less than 5, and the remainder 70 scored 5 or more which is indicative of pathology. A high correlation was found between a positive score on the Malaise and a diagnosis on The Clinical Interview, $r = .74$. Table 5.11 shows the frequencies of affirmative answers on the Malaise Questionnaire.

The results of this self-rating questionnaire indicate the amount of stress the mothers are under. There is a high level of anxiety with almost half stating that they often worry and almost one third 'suddenly become scared for no good reason.' The high scoring on somatic items could manifest possible psychosomatic symptoms, a high percentage had backache, palpitations and headache. Over one third describe feeling

Table 5.11
FREQUENCY OF AFFIRMATIVE ITEMS ON MALAISE SELF-RATING QUESTIONNAIRE.

	N 185 %Freq.
Do you often have backache?	66%
Do you feel tired most of the time.?	36%
Do you often feel miserable or depressed?	24%
Do you often have bad headaches?	30%
Do you often get worried about things?	48%
Do you usually have great difficulty in falling asleep or staying asleep?	31%
Do you usually wake unnecessarily early in the morning?	15%
Do you wear yourself out worrying about your health?	6%
Do you often get into a violent rage?	25%
Do people often annoy and irritate you?	36%
Have you at times had a twitching of your face, head or shoulders?	24%
Do you suddenly become scared for no good reason?	31%
Are you scared to be alone when there are no friends?	23%
Are you easily upset or irritated?	45%
Are you frightened of going out alone or of meeting people?	14%
Are you constantly keyed up and jittery?	24%
Do you suffer from indigestion?	15%
Do you often suffer from an upset stomach?	21%
Is your appetite poor?	15%
Does every little thing get on your nerves and wear you out?	13%
Does your heart often beat like mad?	45%
Do you often have bad pain in your eyes?	24%
Are you troubled with rheumatism or fibrositis?	27%
Have you ever had a nervous breakdown?	12%

Table 5.7 shows the correlations of items on the social questionnaire with one another. Summary variables were used in order to reduce the number of variables involved. As only 28 women were not married they were excluded from this analysis. Other women excluded were those on whom information was incomplete. 146 in all were included in this analysis.

Table 5.7 Correlations of Variable on Social Questionnaire (1)

	EmStat	Income	IncDisat	QualAc	HseAdeq	FamNo	Mardis	RelDis	Pardis
EmStat	1.00	-.39**	.26*	-.45**	-.33**	.18	.35**	.08	.36**
Income	-.40**	1.00	-.43**	.45**	.28**	.01	-.33**	-.07	-.28**
IncDisat	.26*	-.43**	1.00	-.42**	-.29**	.12	.24*	.05	.17
QualAc	-.45**	.45**	-.42**	1.00	.82**	-.33**	.35**	-.07	-.28**

Discriminant Analysis.

Before discussing the findings of this analysis it is worth describing this procedure in some detail. Discriminant analysis is a multivariate analysis which essentially attempts to identify from a range of variables a linear combination of variables which best distinguishes between two categories of cases. As a statistical device discriminant analysis not only selects the variables which best discriminate between the two groups but also provides an estimate of the strength and direction of the discrimination.

Stepwise discriminant analysis is used in which the variables differentiating the two groups are entered in a stepwise progression. The order in which variables are entered is decided by that variable that minimises the value of the Wilks' Lambda statistic, thereby maximising the variance explained by this variable and minimising the unexplained variance. This stepwise progression continues until the addition of a further variable will not add anything to the value of the discriminating equation. At this stage we have an equation based on a number of variables which best distinguishes between the two groups. The smaller the value of the final Wilks Lambda the greater the amount of discriminating power is present in the variables included in the group. A canonical correlation value is calculated for these variables. This operates similarly to multiple regression variable in that the square of the value provides the proportion of the variance of the discriminant function which is explained by the variable groupings included in the

Table 5.8 Correlations of Variable on Social Questionnaire (1)						
	Leisure	AvalConf	SexChld	TotB2	MatPsych	ChldPsych
Empstat	.22*	-.12	.16	.15	.01	.22*
Income	.34**	.11	.04	.30**	.19	-.22*
IncDisat	.51**	.02	.01	.11	.20	.20
QualAc	-.32**	.03	-.02	-.20	-.17	-.30**
HseAdeq	-.22	.08	.02	-.14	-.17	-.32**
FamWo	.09	-.11	-.06	.14	.05	.28**
Mardis	.27**	-.33**	.03	.22*	.23*	.44**
RelDis	.24*	-.25*	-.02	.06	.23*	.10
Pardis	.25*	-.34**	-.03	.33**	.32**	.48**
Leisure	1.00	-.19	-.11	.18	.31**	.14
AvalConf	-.19	1.00	.06	-.13	-.14	-.16
Sex	-.11	.06	1.00	-.22*	-.05	-.18
TotB2	.18	-.13	-.22*	1.00	.17	.46**
MatPsych	.31**	-.14	-.05	.17	1.00	.24*

analysis. Finally the Standard Canonical Discriminant Function is calculated to show the relative contribution and direction of effect of the individual variables.

The two categories analysed were those women with a psychiatric diagnosis and those without a psychiatric diagnosis. 15 variables were included in the analysis, Table 5.10. Some of these were summary values of a number of related variables. Table 5.7, 5.8 show the correlations of these variables with one another. As Marital Dissatisfaction and Parental Dissatisfaction were highly correlated ($r = .73$) two separate analyses were performed, one including Marital Dissatisfaction and excluding Parental Dissatisfaction and the other included the latter and excluded the former. The results of both analyses are reported. Two measures of Maternal Psychiatric illness were available, the Malaise score and result of Clinical Psychiatric Interview. As there was a high correlation between them ($r = .75$) the Malaise seemed more suitable in the analysis. The clinical interview gave a Yes/No result, where results of Malaise varied from 0 to 24.

157 cases were processed for the analysis. 28 who were 'not married at present' were excluded from the analysis. 17 others were excluded as they had at least one missing discriminating variable. Of the 140, 33 had a diagnosis. Table 5.9A shows the steps in which variables are included in the discriminating equation. (Parental Dissatisfaction included). The addition of variables stopped at Income as the addition of a further variable would not have added anything to the value of the

discriminating equation. The canonical function of .44 shows that almost 25% of the variance between the two groups is explained by these five variables. 74% of those without a diagnosis and 67% of those with a diagnosis are correctly classified using these variables as predictors.

Table 5.9A Variables included in Discriminating Equation.

Action	Wilks'				
Step Entered Removed	Lambda	Sig.			
1. Pardisat	.9112	.0004			
2. Leisure	.8551	.0000			
3. EmpStat	.8312	.0000			
4. Reldisat	.8176	.0000			
5. Income	.8060	.0000			
<hr/>					
Canonical Function	Wilks' Lambda	Chi-Squared	D.F.	Sig.	
.4403835	.8060	29.213	5	.0000	

Table 5.10A Summary Results of Stepwise Discriminant Function Analysis.

Variable	Women with Psychiatric Diagnosis.
Husbands Employment Status	-.51
Income	-.30
Income Dissatisfaction	-
Quality of Accommodation	-
Dissatisfaction as a Housewife	-
Family Number	-
Standard of Living	-
Dissatisfaction with Neighbours	-
Dissatisfaction with Relatives	.33
Dissatisfaction as Parents	.65
Dissatisfaction with Leisure	.50
Available Confident	-
Sex of Child	-
Child's Total B2 score	-
Canonical Correlation	.44
Wilks' Lambda	.80
Chi-Square	29.21
P	<.0001
%classified correct	Diagnosis+
	67%
%classified correct	Diagnosis-
	74%
%classified correct	Total
	72%

Table 5.10A shows that an equation based on five variables maximally distinguishes between those women who have a psychiatric diagnosis and those who do not, and it correctly classifies 72% of cases. Examination of the discriminant function coefficients show that, in order of importance, those most likely to have a diagnosis are:

- 1) those who score highly on Dissatisfaction as parents. This is a summary value of situational handicaps to child rearing, problems with children other than the index child and dissatisfaction as a parent.
- 2) those whose husband's are unemployed.
- 3) those who score highly on Dissatisfaction with Leisure. This is a summary value for opportunity, management and satisfaction with leisure.
- 4) those who score highly on Dissatisfaction with Relatives. This is a

As stated earlier, Parental Dissatisfaction and Marital Dissatisfaction are highly correlated ($r = .73$). If both were included in the same analysis the discriminating power of one would be cancelled out by the other and only one would appear in the final equation. As both variables have been shown to be highly significantly associated with depression using Chi-squared test of significance, Table 5.6, two analyses have been performed, including these variables separately. A second discriminant analysis was performed using the same variables as above, but substituting Marital dissatisfaction for Parental Dissatisfaction. Results obtained are shown in Table 5.9B and 5.10B.

Table 5.9B Variables included in Discriminating Equation

Action	Wilks'			
Step Entered Removed	Lambda	Sign.		
1. Leisure	.91	.0004		
2. MarDisat	.89	.0003		
3. Empstat	.87	.0003		
4. RelDisat	.85	.0004		
5. TotB2	.84	.0004		
6. Income	.84	.0007		
Canonical Function	Wilks' Lambda	Chi-Squared	D.F.	Sign.
.3993	.8405	23.449	6	.0007

Leisure = Summary value of dissatisfaction with opportunity, management and satisfaction of Leisure activities.
 MarDisat = Summary value of Marriage items.
 Empstat = Husband's employment status
 RelDisat = Summary value of dissatisfaction with opportunity, management and satisfaction with contact with relatives.
 TotB2 = Childs score on B2.

Table 5.10B Summary Results of Stepwise Discriminant Function.

Variable	Women with Psychiatric Disorder
Employment Status	-.48
Income	-.25
Income Satisfaction	-
Dissatisfaction as a Housewife	-
Family Number	-
Standard of Living	-
Dissatisfaction with Neighbours	-
Dissatisfaction with Relatives	.36
Dissatisfaction with Marriage	.41
Dissatisfaction with Leisure	.50
Available Confident	-
Sex of Child	-

Dissatisfaction is excluded from the included variables the discriminating power of Child's B2 increases. This equation is less robust than the previous one, with these six variables explaining 16% of the variance between the two groups, however these variables as predictors of women mental health will correctly classify 71% of cases. The importance of social relationships and income is evident.

Discussion.

33% of the women studied were found to be suffering from a psychiatric disorder. This is a much higher rate than would be expected in the general population, but can be explained by the nature of the group studied. The women in this study are selected in such a way that they are not typical of the general population. They are aged between 28 and 50 years, were all but one married at some time and all had at least one child. 37% of the women had a child with a psychiatric disorder, where the expected rate in the general population would be 25%. This rate is similar to that found by other authors who have assessed the prevalence of depression in selected groups of women, such as mothers of attenders at child guidance clinics (Rutter 1970, Leader et al 1985) and

income is the important factor here rather than unemployment as such. A low family income is associated with lack of facilities such as telephones, cars, and babysitting facilities leading to greater social isolation. The finding that many women from local authority housing were socially isolated has been reported elsewhere (McGee and Fitzgerald 1988) and is confirmed in this study. This has been extensively discussed in Hannah Gavron's (1966) research on "Captive Wives". She pointed to the myth of working class cohesiveness, social embeddedness and solidarity in relation to the young mothers she studied. It was instead, she suggested, upper class women who enjoyed a wide circle of supportive friends. Many of the women in our study lived in new housing developments where opportunities for local social interaction have not yet been fully developed and there is little sense of neighbourhood identity. Those living in local authority housing that was built in the previous five years were much more likely to be depressed than those living in older housing estates. It was also apparent that women in newer housing estates that were built near older estates had a lower rate of depression. This is to be expected. Local authority houses tend to be built without providing adequate social supports. Schools and churches were built initially but shops, community centres and social facilities are not built for some years. It appeared in this study that it took ten years for a network of social supports to develop within a housing estate, and once this developed an improvement in mental health was evident. A noticeable effect on local authority housing estates was the £5,000 surrender grant. This was a grant offered to tenants who vacated a local authority house and bought a private dwelling. Tenants

were required to be in fulltime employment before they were entitled to such a grant. A large proportion of eligible tenants availed of this grant, these tended to be the more successful and resourceful in the community. The result was to leave the unemployed and often the more dependent in the estates, this reduces the cohesiveness that had formed and tends to group multiproblem families together.

The importance of social support and specifically the presence of a confiding relationship is very evident. Brown et al (1986) have shown that social support at the time of an important loss or disappointment reduces the chances of developing depression. Some authors have failed to find such a link (Henderson et al 1981) and have speculated that what is primarily involved in such findings is the misperception of 'adequate' support as 'inadequate' on the part of those who go on to become depressed. In other words what actually

and management of social relationships would point a real protective effect in adequate social relationships. It is interesting to speculate as to how social supports work. Cohen and Willis (1985) have suggested the use of two models to explain the impact of social support, the 'main effect' and the 'buffering' models. The 'main effect' model is considered to operate irrespective of any stress; it offers general health protection by increasing the individuals sense of overall wellbeing. The 'buffering' model applies only to individuals who are exposed to stress: social supports are hypothesized to protect individuals from the effects of stress. Both these models can be applied to this study. The 'middle class' women tended to have less stress in their lives, social supports provided an improvement in general wellbeing and could be claimed to improve self esteem. This has an effect of making the woman feel more competent and she is in a better position to plan her life effectively. For those women with stress in their lives, and many of the women had the constant stress of lack of money, marital problems and difficulties with their children, social support acted as a buffer against these stresses. Women without social support are likely to have a poor self esteem; continual stress without social support leaves them unable to cope and leads to the development of 'learned helplessness'. As Seligman (1975) has pointed out this leads to depression which is particularly likely when the woman feel she has no control the stress in her life. (Abramson et al 1978)

The lack of any association between unhappy childhood experiences and adult depression is interesting. This may well be due to a tendency to idealise one's childhood, this is unlikely, as over one third reported having unhappy childhoods. As Brown has recently found (1988), women who experience rewarding relationships in adult life are less likely to become depressed even if they have had unhappy childhoods. Women who reported having unhappy childhoods and unhappy marriages were more likely to be depressed than those who had unhappy childhoods but now have happy marriages.

Discriminant analysis shows that those women most at risk are those who are socially isolated, in unsatisfactory marriages and have low

who are targetted by

SUMMARY SECTION FIVE

- 5.0 185 mothers are assessed for Psychiatric Disorder.
- 5.1 Their material circumstances and social and family environments are assessed.
- 5.2 33% of the mothers studied had a Psychiatric Disorder.
- 5.3 30% of the mothers studied were depressed.
- 5.4 Depression was significantly associated with low income
- 5.5 Depression was significantly associated with social isolation.
- 5.6 Depression was significantly associated with Marital Discord.
- 5.7 Depression was significantly associated with difficulties with children and dissatisfaction as a parent.
- 5.8 Women with low income tended to be more likely to be socially isolated than other women.

MAIN FINDINGS AND RECOMMENDATIONS.

The high prevalence of disorder in children , the association of behavioural disorder, poor reading attainment and lower IQ scores with social disadvantage prompts the following recommendations.

1. Parents are underestimating their child's problems and they should be made aware of this.
2. Few children or mothers who were identified as suffering from a psychological disorder were receiving any treatment for this. General Practitioners and Social Workers need to identify and recognise illness in both mothers and children. Teachers need to be able to recognise psychological disturbance in children.
3. Lack of adequate social support was significantly associated with both mother and child morbidity. The establishment of 'Drop-In' Centres within

6. There is a need for quality child care and day care. A most valuable area where financial resources could be increased is in the area of high quality cognitively orientated pre-school curriculum. This combined with parental training for behaviourally disturbed 3 and 4 year olds has been shown to produce economically efficient gains. By the age of 21 children on this programme tend to stay in fulltime education longer, are less likely to be arrested and are less likely to be on social welfare,
7. New housing estates should be built close to old ones in order to facilitate social linkage. Shopping centres and community facilities should be built at the same time as the new housing estates. It is the newest housing estates which have been built at a distance from other estates that have the highest rates of psychological disorder.
8. There is a need for review of The Department of Education's policy of granting concessionary teachers to schools in socially disadvantaged areas. There is a need to provide more concessionary teachers in 'disadvantaged' areas.
9. There is a need to mix pupils from socially advantaged and disadvantaged homes in schools and a need to mix private and public accommodation.
10. There is a need for increased emphasis on remedial education.
11. The use of psychotherapeutic groups for conduct disordered children within the school setting should be explored.

12. There is a need for an increase in the number of educational psychologists. These psychologists would be best employed working part-time in schools and part-time in Child and Family Centres.

13. Recent promises by the Department of Education to expand the existing Home-School Liaison Programme are welcomed and encouraged.

14. As child morbidity is associated with maternal psychiatric illness and marital disharmony then the early recognition and treatment of these problems will prevent the development of child difficulties.

15. Childhood psychological problems have a multifactorial aetiology, In treatment it is not sufficient to treat the child alone, it is important to address other critical factors such as family disharmony and parental mental illness.

18. Professional and voluntary agencies must help people to develop a sense of control of their lives and reduce the sense of learned helplessness that sometimes pervades socially disadvantaged areas.

19. There is a need for greater liaison between the Departments of Justice, Health and Education.

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