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UNIT FOR THE STUDY OF
ENVIRONMENTAL FACTORS
IN MENTAL AND PHYSICAL ILLNESS

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INTRODUCTION

In April 1962 the Medical Research Council set up a Unit at the London School of Economics to study problems on the borderline of medicine, mental disorder and sociology. This is a report of the activities of the Unit during the subsequent three years.

I. RESEARCH IN PROGRESS AND PLANNED

The Unit is engaged on two major research projects, first the continuation of the National Survey of Health and Development and second two new studies of the care of young children.

THE NATIONAL SURVEY OF HEALTH AND DEVELOPMENT

1. DESCRIPTION OF THE SURVEY

The National Survey is a continuing study of 5,000 young people who have been under observation since they were born in the first week of March 1946. They comprise all legitimate single births in middle class families and agricultural workers' families during that week and one-quarter of the legitimate single births in other families. Information on these children's parents, homes, educational progress, behaviour, jobs and health has been given by health visitors, school nurses, school doctors, teachers, youth employment officers, education departments and hospitals throughout the country. Over a period of nineteen years losses have been low (approximately 10%), and for some groups, such as those at the university and in teacher training colleges, very small indeed.

Since this Unit was set up much additional information has been collected about the Survey sample. The Youth Employment Officers have seen the majority of the fifteen - to seventeen-year-old school leavers and have provided exhaustive information about their jobs and training, while the young people themselves have filled in a personal questionnaire aimed at assessing their job satisfaction. The majority of those who were not interviewed by Youth Employment Officers were visited by commercial interviewers who obtained equivalent information. During these interviews our information was brought up to date on hospital admissions, out-patient attendances and accidents. Whenever a young person was taking a part-time course of technical or further education, additional information was obtained from the principal of the relevant technical college. The job information is being kept up to date and the analysis of these very extensive data is well under way. It will be concerned with the utilisation of talent and will examine the extent to which young people receive training for work at a level of skill which is suited to their ability and school attainment.

A grant for this part of the National Survey was made in 1961 by the Department of Scientific and Industrial Research, now the Science Research Council.

The children who remained at school have also been the subject of study, and full information is available of their examination performance as well as of a whole variety of aspects of their school careers. Some 500 have proceed to training colleges, universities or full-time courses at technical

/colleges,

colleges, and all but three of these have filled in an exhaustive questionnaire concerned with the transition from school to higher education and with their academic and social activities at the university or college. Approximately 140 of those at the universities have been interviewed by members of the Unit. These interviews were conducted in small groups, and the discussions, which were of previously selected topics common to all the groups, were taped; they are a valuable addition to the material previously collected by questionnaire.

Both the Home Office and the Scottish Home and Health Department continue to provide us with information about all members of the Survey sample who were sentenced by the courts or cautioned by the police.

With the support of the Ministry of Health and the Scottish Home and Health Department it has been arranged that health visitors throughout Great Britain should make a yearly visit to the Survey members to collect basic information about their jobs and job changes, marriages, births and simple items relating to their health and use of the health services, such as visits to general practitioners, accidents and admissions to hospitals. The first home visits were made in March 1965, and the aim is to keep in touch with the young people until they are 21 (in 1967), when we hope to make a much more detailed study of their health, occupations and interests.

Apart from collecting this additional information the Unit has been engaged in the analysis of data already collected. To a greater or lesser extent all members of the Unit are working on the Survey material, and many of the topics studied have a direct bearing on the family studies described later in this progress report.

2. ANALYSIS OF THE DATA

The main work of analysis has been to establish relationships between selected characteristics of the children, their parents, their schools, their homes, their health and their education. This has made it necessary to summarise the extensive information collected over the years so that we can assess the children in a variety of ways. In arriving at these assessments we have used methods that vary in sophistication from principal component analysis and discriminant analysis to a simple addition of items, and the assessments themselves range from scores of aggression, nervousness, maladjustment, etc. to a social classification based on the education, occupation and social origins of both parents. For both medical and social research this social classification has many advantages over a purely occupational one.

In studying the inter-relationships of the assessments and in the general analysis of the data we have received invaluable help from Mr. H.R. Simpson of Rothamsted Experimental Station and have used the multivariate programmes available there to unravel complex and overlapping effects. These methods, which were originally developed for use in agricultural statistics, have an important application in the analysis of survey data.

We intend to use the assessments in a number of predictive studies, for example of the relation between maladjustment as measured at school with later job stability, or of the relation between the home and school background of the young people on the one hand and success or failure in part-time technical or further education on the other.

/At a simpler level

At a simpler level we think it important to provide a description of the children in terms of their social, educational, medical and biological characteristics. The object is to provide a series of bench marks with which observations made on subsequent populations, such as the 1958 Perinatal Survey sample, may be compared. These descriptions will also be of use to those engaged in contemporary studies of special groups of children, for example delinquents, to indicate in what ways and to what extent the groups studied differ from a random sample of children.

At the request of the Home Office a computer analysis was designed and carried out giving an exhaustive description of the Survey children. We are also preparing for transfer to magnetic tape all the Survey data that is worth preserving. This tape will be available to accredited research workers.

Some indications of the main areas of analysis are given in the following brief summaries of the book and papers published since the Unit was set up - the numbers in brackets refer to the list of references at the end of this report.

Children at Primary Schools

'The Home and the School' published in 1964 (6) produces strong evidence that much potential ability is wasted during the time children are at primary schools and that many children of relatively high ability are misdirected at the point of secondary selection. This, it seems, is part of a process that starts in early childhood and continues at school. Children from culturally deprived homes, when they arrive at school, are likely to be put in low streams, perhaps with the intention of giving them special care. Once in a low stream, however, they are unlikely to get out of it and thereafter suffer a cumulative series of disadvantages, unintentionally imposed by the rigidity of our educational system.

A number of biological and medical topics were touched on in this book. These include an assessment of the effects of the rate of sexual maturation on educational performance, the relation of emotional adjustment to success or failure at school and the part played by environmental factors in determining the differences in measured ability and attainment found in children coming from different sizes of family and from different positions in their sibships.

A sequel, now being written, on secondary education is designed to show how far success or failure in the secondary schools can be predicted at different stages of the educational process. This sequel has a more medical orientation than its precursor and there will be chapters on the effects of illness, emotional adjustment and physical handicaps on the educational performance of children.

The following topics are some of those discussed in recent papers:-

(a) School Absences

Absence from primary school impairs a child's measured ability and frequent episodes of absence are more harmful than an occasional long one (12). Frequent absence is not invariably associated with poor educational progress; in the upper middle class, for example, even children who have

/been consistently

been consistently absent maintain their place in school, and in the best primary schools the children who have lost much time early in their school years catch up with and surpass the rest. Children who are frequently absent from school are handicapped both through failing to keep up with their class-mates and, at the point of secondary selection, through failure to get the grammar school places that would be expected from their performance in tests. Absence from the primary school is an important, and largely avoidable, source of educational waste. Further studies of the effects of school absences are being planned.

(b) Comparison of Primary Education in Scotland and England and Wales

The Scottish children are superior to the English and Welsh in attainment tests given in the early school years and they retain their advantage in mathematics up to the age of fifteen, though they have by then fallen behind the English children in vocabulary and reading (25). The English and Welsh children are superior in tests of non-verbal intelligence at each age. The social inequalities in selection at 11+ and 12+ in the two countries are similar, except that at almost every level of measured ability and in both middle and manual working classes the Scottish child has a greater chance of being placed on a selective course. Indeed, at each level of ability a manual working class child in Scotland is approximately as likely to enter a five-year selective course as a middle class child in England and Wales is to enter a grammar, technical or independent school.

(c) The Effects on Educational Performance of Local Differences in the Supply of Selective School Places

This paper (29) was prepared at the request of the Department of Education and Science for internal circulation. As the proportion of selective school places provided in an area increases, a higher proportion of pupils remain at school after the minimum leaving age and enter a sixth year at school or an equivalent course at a technical college. Moreover, pupils in areas well supplied with selective school places do better in the General Certificate of Education than those in areas where places are in very short supply. Girls particularly seem to be affected; in the better provided areas they do as well as the boys in tests of school attainment and intelligence at fifteen, whereas in areas where there are few places they do considerably worse. These conclusions hold for both middle and manual working class pupils. The clever children, on the average, do well at school whether they live in areas with good or poor selective school provision. Pupils who live in Local Education Authority areas which offer a substantial proportion of places in comprehensive schools do not do better in tests and examinations than children of similar measured ability in the rest of England and Wales; indeed, the girls do relatively less well, and the lower manual working class children, in particular, are at a disadvantage.

(d) The Later Effects of Nursery School Attendance

At eight years, children who have attended Local Education Authority nursery schools or classes make slightly higher scores in tests of ability and school attainment than children who went straight into infant schools at five (11). Between eight and eleven, however, the nursery school children lose their initial advantage in measured ability, and by fifteen do very slightly less well than expected. Reports on the behaviour of former nursery school children when they reach the secondary schools show them as being neither better adjusted

/emotionally or

emotionally or less delinquent than those who were not at nursery schools. Indeed, they appear to be rather less well adjusted, though this may be explained by the fact that nursery schools tend to take the more difficult children who are a trouble to their parents.

(e) Puberty and Educational Attainment

The boys and girls who are early in reaching sexual maturity are superior to the late maturing children in tests of mental ability and school achievement (13). This is not explained by a pre-pubertal spurt in mental growth as the early maturing children are as much ahead of the late maturing ones at eight as they are at fifteen years. There is no suggestion that the early maturing children do not fulfil their academic promise, though a relatively large number of the manual working class children at grammar and technical schools who mature early tend to leave after gaining an 'O' level qualification.

The factors associated with early and late puberty are being investigated (22). The average age of puberty for both boys and girls is similar in all social classes, but it varies consistently with family size, being advanced in the small families and retarded in the large. The fact that the association between puberty and family size is as marked for the first-born children as for the later-born points to events occurring after birth as setting the pace of sexual development, and a study of birth intervals and heights suggests that the first four years of life are the crucial ones. The marked association between the rate of sexual maturation and family size suggested a possible explanation of the superior ability of the early maturing children, and it turns out that the differences in ability between early and late maturing children vanish for only children and are considerably diminished for the rest when allowances are made for the number of sibs.

(f) The Association between Height and Educational Ability

It is well known that there is a low positive correlation between height and measured ability, but it is by no means clear how far this is explained by the fact that the taller children come from the more privileged families and at each age include a high proportion of early maturers. In the National Survey data (14) the correlation between height and test score at ages from eight to fifteen years remains at the approximate level of +0.15, even when allowances are made for sex, stage of sexual development, social class and size of family. The correlation therefore cannot be explained by saying that an advancement in physical development is directly associated with an advancement in intellectual development.

(g) Environmental Factors in Growth

Using a statistical technique for handling non-orthogonal data, the heights of the Survey children at 7, 11 and 15 years were related to the social and educational background of their parents, the number of brother and sisters and the age of onset of puberty (15). An unexpected finding is that, at each age, the growth of girls is more influenced by environmental factors than the growth of boys. In the larger families middle class children are taller than manual working class children, but among only children there are no statistically significant social class differences in height, and the manual working class boys and girls are if anything slightly taller than the middle class. The only social class in which increasing size of family is not associated with a fall in average stature is the upper middle class.

/(h) Ability and Adjustment

(h) Ability and Adjustment of Children who have had Measles

It has been suggested that the cost and possible dangers of mass vaccination against measles do not justify its introduction, though this view would have to be modified if there were confirmation of reports that a substantial proportion of children who have had apparently uncomplicated measles are handicapped in later life. Apart from the National Survey there is no body of data which allows us to relate the later development of children to their history of early infections. An examination of the Survey data (8) gives no support to the view that apparently uncomplicated measles in early life is followed by either poor progress at school or by behaviour problems.

(i) Air-Pollution and Respiratory Tract Infections in Children

In collaboration with the Air Pollution Research Unit and the Warren Springs Laboratory the relationship between air pollution, as judged by domestic coal consumption, and respiratory tract infections of children in the National Survey sample has been examined (23). Simple and consistent results are obtained. The occurrence of minor respiratory illnesses such as colds, sore throats or tonsillitis is not related to the amount of air pollution, but the frequency of more serious respiratory illnesses such as bronchitis and broncho-pneumonia increases as air pollution increases. This relation holds for both boys and girls and for children in middle class as well as manual working class families. The association between respiratory tract infections and air pollution is found among children at all ages until eleven, and the results of chest examinations by the school doctors at fifteen suggest that it persists at least until this age.

(j) Epilepsy in the National Survey Sample

The prevalence and inception rates of fits reported in the National Survey agree well with previously published studies (2). There is no relationship between birth order and the occurrence of fits, but there is an excess of premature children in the group with repeated fits. Fits before the age of two years are rarely followed by fits after that age. Children with fits before the age of two which were associated with pyrexial illnesses did badly in the tests of mental ability and school attainment.

(k) The Characteristics of Boys who have been before the Courts

288 of the Survey boys had been sentenced by the courts by the time they were seventeen years old, and their social background has been looked at in two ways (24). When they are grouped by their fathers' occupations there are considerable differences between the proportion of delinquents in the non-manual and the manual working classes, but within the manual working class itself, subdivided by level of skill, there are only relatively small and inconsistent differences.

A more satisfactory method of grouping the boys is by taking account of the education and social background of both their fathers and their mothers as well as of the occupations of their fathers. Using this method of classification a large group of lower manual working class boys is isolated who have a risk of delinquency as high as that recorded for the much smaller group of boys whose fathers are semi-skilled or unskilled manual workers. In contrast there is another relatively large group of upper manual working class boys who are

/considerably less

considerably less likely to be delinquent than the boys of black-coated clerical workers. The boys from families broken by divorce or separation are more likely to come before the courts than would be expected, whereas those from families broken by death have rates of delinquency that are closely similar to those of boys from unbroken homes.

The relationship between delinquency and symptoms of maladjustment has also been studied (18), and it seems that teachers are able to pick out boys who at a later age get into trouble with the police. They identify them as being persistently disobedient in the classroom, showing resentment to criticism or punishment, lying to evade trouble, cheating in school work, being aggressive and quarrelsome with other children, being rough in the playground and playing truant from school.

A number of further studies of the delinquents is being planned, and particular attention is being paid to their educational achievement, which is outstandingly poor.

3. FUTURE PLANS FOR THE NATIONAL SURVEY

The study of higher education will continue until the full-time students at universities, training colleges and technical colleges have completed their courses and entered employment. One of the main aims of the study will be to see how far success or failure in higher education can be predicted from performance at school, the home background, the aspirations of the parents and the emotional adjustment and physical health of the students. We are particularly interested in those who drop out early from higher education, and we will be arranging special interviews with them to find out the cause of their leaving and what jobs they have taken on.

As already mentioned, the young people who have left school or higher education are being seen each year by health visitors, who record simple information about their jobs, the training they are receiving, the major illnesses they have had, the visits they have made to doctors and any admissions to hospital. The main purpose of these visits is to maintain contact with the young people and allow us to keep up to date with their training and check up on hospital admissions. We are, during these interviews, informed of marriages and the birth of children, and we intend to obtain information about the education and social background of the spouse and to assess the standards of care given to the children in a way that is similar to the assessments made when the parents themselves were small. This will have a particular interest when one parent is known to have grown up in a disturbed or insecure family and will allow us to test the frequent assertion that the children of broken marriages are themselves likely to have serious marital difficulties and fail as parents.

Two further intensive studies of these young people are planned, one when they are twenty-one years old in 1967, the other when they are twenty-five in 1971. By the latter age most will have reached their final educational level and will have started on their main careers.

FAMILY STUDIES IN WALTHAM FOREST

When the Unit was set up, it was decided to look for a Local Authority area, within easy reach of the London School of Economics, that would provide facilities for studying child development. Dr. Wright, the Medical Officer of Health for Leyton, offered us help and facilities in his Borough, and during the subsequent three years close ties have been woven between the Unit and Leyton.

/With the reorganisation

With reorganisation of Greater London, Leyton was combined with Walthamstow and Chingford to form Waltham Forest, a Local Authority with a population of approximately 250,000, predominantly manual working class in the south and middle class in the north. Dr. Wright was appointed Medical Officer of Health for the new Borough and he has been able to offer us, with the approval of Dr. Stephens, the new Director of Education, premises in the area. These rooms will be used for testing and observing children from the "Family Studies" (see later in this section) and as a base for enquiries into the educational performance of primary school children which we hope to launch by the New Year.

Our ties with Leyton have been strengthened by the appointment of Dr. Mary Gilchrist as a part-time worker on the Unit. She was for thirty years the School Medical Officer in Leyton and has an intimate knowledge of the area and people.

So far the work in Leyton has been focussed on child care, but it is intended to launch studies of other problems. With the support of the Education Department an investigation into the relation between the aspirations of parents, their attitude to their children's academic work and the children's behaviour and success in primary schools is being started in October by a Ph. D. student working with this Unit.

1. THE FAMILY STUDIES

Many of the National Survey findings on education, physical growth and disturbed behaviour suggest that the pre-school years are of particular importance for the later development of children. This, of course, agrees with the conclusions of many studies of children in institutions or in abnormal families, while at a different level Harlow has shown that rhesus monkeys reared without a mother, or a satisfactory substitute for her, are severely disturbed both as infants and as adults. Complete deprivation of social contacts in the first months of life is followed by an inability to establish normal social relationships with other monkeys in later life. Hinde, observing rhesus monkeys in the more natural circumstances of small family groups, finds that over-protection by mothers reduces the exploratory behaviour of their infants, and he also notes that relatively short periods of separation of a baby monkey from his mother is followed by abnormal clinging when the mother returns. In rats the effects of early handling on growth, emotionality and learning have been described in numerous papers, notably by Levine and Denenbergh. These and many other studies suggest strongly that the amount of stimulation, attention and encouragement children receive in their early years from adults may have an important effect on their later intellectual and social development.

The Unit has two inter-linked studies in progress. One aims at describing the variations in infant and child care that are found in ordinary middle class and ordinary lower manual working class families. The other aims at identifying groups of mothers who are neurotic or obsessional and then describing their patterns of domestic behaviour and the interaction of these mothers with their children.

From the first study a description will be obtained of normal variations in care in two social classes; from the second, more extreme and perhaps pathological patterns of care will emerge.

/(i) Child care

(i) Child Care in 'Normal' Middle Class and Lower Manual Working Class Families

With the aid of the Public Health Department, who at our request kept a special register of all pregnant women, forty lower manual working class and forty middle class women were selected who were pregnant and already had one toddler who would not be more than three years old at the time the second baby was expected. These women are being visited during the period of their pregnancies and the subsequent two years, with the aim of obtaining a quantitative description of the main characteristics of the routine of the household and the changes that occur as the child grows older and a younger sib is born and grows up.

Almost all studies that relate the early experience of children to their later development have been focussed on qualitative relationships, for example, the mother's warmth or spontaneity, the severity of disciplinary measures or the overt love or hostility shown by the mother to the child. Yet animal experiments and some of the work on deprived children suggest that quantitative aspects of care may be more important. For this reason our first aim has been to measure the amount of stimulation of different kinds that children receive in their homes and outside them. As this is a neglected area of study we have had to devise our own method of describing family interactions, in a way that allows us to identify families that provide an abnormal intellectual or social environment for their children.

The direct observation and recording of events within the home is impracticable except over very short periods of time which are probably a-typical, and so it is necessary to rely on the mothers, and to a lesser extent on the fathers, for information. The method developed is for the mother to be asked to recall the events of the previous twenty-four hours; this interview is taped. The interviewers are trained to guide the parent through the day, starting when the child or baby woke on the previous morning, and noting the types of activity on which the child was engaged, the time spent on them the physical limits placed on the child and the degree to which the mother or other persons were involved. Only information on normal and undisturbed or "standard" days is accepted as valid, the assumptions, here being that everyday family life is essentially repetitive in all but the most disorganised households and that what is important for the development of a child is this basic pattern.

The taped interviews of the standard days were coded to show the amount of time spent on each activity, the extent to which others are involved with the child and the amount of restriction, if any, put on the child. Two separate persons did the coding and any discrepancies were settled by discussion. After much trial and error a satisfactory, consistent and relatively simple method of coding the taped data has been developed and 200 interviews are now being analysed, five for each family. The first was taken during pregnancy and the others after the birth of the second child.

In addition to recording activities, some assessments are being made of the quality of interactions, for example of the warmth and spontaneity of the mother in interviews, the activity or passivity of the child, the severity of discipline and the overt love or hostility of the mother to the child. Initially it is likely to be more profitable to describe the families and individuals in terms of the measurable data. If these fail to differentiate them, however, the more complex and difficult problem of inter-personal relations will be studied.

The analysis of the standard day diaries is now proceeding rapidly and considerable differences are appearing between the care given to children

/under three years

under three years of age in the two social classes that are being studied. It looks as if manual working class toddlers are more stimulated than middle class toddlers, in the sense that they have more prolonged and intense contacts with all members of their families.

(ii) Pilot Study of Mothers with Obsessional Tendencies

The aims of this study are:-

(a) to develop a standardized method of describing the extent and severity of obsessional characteristics, and

(b) to see the extent to which women who are picked out as being obsessional or excessively houseproud show unusual patterns of domestic activity and abnormal interactions with their children.

Our interest in this type of abnormality arises from the strong suggestion in a study by Valerie Cowie that the children of patients with a hospital diagnosis of obsessional neurosis show more signs of disturbed behaviour than expected. Moreover, child psychiatrists often remark that many of the children they see in child guidance clinics have parents who appear to have some obsessional characteristics.

Obsessional patients are comparatively rare and so were not a feasible source for sampling. It seems reasonable, however, to suppose that there may be marked effects on child care and domestic activities in families where the mother, though not under treatment and perhaps unaware that she is peculiar or unreasonable, shows obsessional or extreme behaviour. We therefore decided to try to identify women of this type who were not incapacitated but yet clearly recognisable as being rather out of the ordinary.

(a) The Identification of the Houseproud Wives - the Obsessional Inventory.
The health visitors at three Leyton health clinics were given a talk on obsessional symptoms and behaviour and also provided with written specifications of the sorts of behaviour to look for. They were then asked to note from their records the names of any women seen by them within the last three years who seemed to show obsessional behaviour. They put forward the names of fifty women whom they discussed with members of the team. After discarding a number as unsuitable for this project the remainder were given an obsessional inventory which will now be described.

This inventory is designed to assess the amount and type of obsessional behaviour in populations where the majority of those who show it are not being treated. It also has clinical applications, as it provides a standardised way of describing the symptoms of different types of obsessional patient and of measuring changes over time in the symptoms of individual patients. The 84 items in the inventory cover a wide range of obsessional thought and behaviour and also personality traits such as meanness, irritability, etc. which are traditionally associated with obsessional symptoms.

The psychiatric nature of these questions was disguised by interposing them with questions from the Cornell Medical Index. All items were presented to the women as a pack of cards which they were asked to put into one or other of two post boxes, one for the symptoms which they admitted to having and the other for the symptoms which they denied. When they had sorted the cards in this way they were questioned by the psychiatrist about the extent to which they resisted admitted

/symptoms

symptoms and how much these symptoms interfered with their other activities.

The scores from this inventory differentiate well between obsessional patients and normal women; most of the housewives selected by the health visitors as being excessively houseproud make scores that fall in between the normals and the patients.

On the basis of information collected from hospital patients, normal housewives and excessively houseproud women, the inventory is being shortened and a computer analysis is planned to identify the most effective items and to give a formal description of the reliability and validity of the method with a view to its application to clinical problems.

(b) Observations on Excessively Houseproud Women and their Families

After the mothers nominated by the Health Visitors as obsessional had been screened, visited and found willing to co-operate, the Health Visitors were asked to select control families of the same structure and social status. Twenty such pairs of families are being studied by the qualitative techniques referred to in the study of normal families. In addition to measures of the child's activities, measures of the mother's own activities are obtained, and methods of describing a child's interaction in cruder terms over longer periods of time, such as a week, are also being tried out. These families are also being used as subjects in collaboration with Dr. Phillip Graham (of the Institute of Psychiatry, Maudsley Hospital) for his work on developing a method of describing the individual temperamental characteristic of children.

While the collection and analysis of the information on these families is not yet complete, the results to date suggest that the children whose mothers were nominated by the health visitors as houseproud or obsessional have more short periods of close contact with their parents (and particularly with their fathers) than the children of the controls have. They are, however, more often left alone and have fewer contacts of a more casual and less intense type.

(iii) Study of Mothers with High Neuroticism Scores

All women being studied in Waltham Forest and their husbands have been asked to complete the Cornell Medical Index and the Maudsley Personality Inventory, and on the basis of these two instruments a number of men and women who score highly for neuroticism have been picked out. These are being specially studied with the object of seeing whether it is likely to be profitable in the future to pick out a large group of neurotic parents in order to record the impact of their neuroticism on the running of the family, their contacts with their children and the later development of the children.

2. FURTHER DEVELOPMENT OF THE FAMILY STUDIES

The next stage in these pilot studies is to work out methods to describe the behaviour and intellectual development of the children. We are collaborating with Dr. Phillip Graham who is using a modification of a method developed by Thomas et al to describe individual temperamental characteristics of children. Dr. Mary Gilchrist is testing the babies, using the Griffith development scale, and the toddlers, using Terman-Merrill tests. These assessments are made at home, a more natural setting than a clinic. The standard situation provided by these tests is being used to record motor behaviour and certain individual characteristics of the children. Timed counts will be kept of the different types of behaviour symptoms observed, and the reaction to success or failure in each part of the tests will be

/recorded.

recorded. It is also planned to observe small groups of children in a play room equipped with one-way screens. Small play groups will be set up with children from the various types of families enrolled in this study, and we will identify and describe the quality and quantity of the behaviour of the children in relation to each other when they are playing freely, when they are given competitive tasks to complete, etc. An individual child will on different occasions be included with different children in these play groups, so that we can see what items of behaviour are consistently abnormal or repeatedly make the child stand out as unusual.

At a later age the children will be observed on entry to infant schools, and their teachers will be asked to report on their behaviour and adjustment.

At present we are studying a relatively small number of families with a wide range of characteristics. This is because our aim is to develop methods of assessment rather than to establish relationships between the quantity of stimulation and the development of children. Once reliable methods are available we hope to use health visitors to screen a large population in the Waltham Forest area and nominate to our specifications a-typical families which are likely to show extreme patterns of care. These, if judged suitable by use, will be included in a much larger study of the impact of early experience on the later development of children. We would hope within the framework of this study to use planned interference (for example, the selection of some children for special treatment in play groups which others do not get) to help establish the nature of any relationships that are found.

II. COLLABORATION AND CO-OPERATION

One of the aims of placing this Unit at the London School of Economics was to promote the co-operation of doctors, sociologists and psychologists in joint research and in the development of new techniques. It is appropriate then to discuss, here, the relation between the Unit and other institutions and bodies.

(a) The Unit and the School

From the outset the Unit was housed within the School and, in spite of the present shortage of space for both students and staff, the accommodation provided has been adequate for our needs. Recently new and larger premises have been provided which should allow for the growth of the Unit during the next five years. The School has extended the facilities of the Senior Common Room to all members of the Scientific staff of the Unit and the Director is an honorary lecturer and a recognised teacher of social medicine at the School and a member of the Board of Studies in Sociology of the University.

The Unit members are taking an increasing part in teaching at the School. Two courses of lectures in the Departments of Sociology and Social Administration are given by Unit members, and a third member has given tutorials to sociology students at the School. A seminar on the Sociology of Education was run jointly by the Unit and the Department of Sociology in 1964, and in 1965 the Unit was responsible for organising a seminar on methods of studying child development. Both these seminars aroused considerable interest both inside and outside the School.

A welcome development is the attachment to the Unit of a post-graduate sociology student who is working for a Ph. D. degree under the joint supervision of the Director and Professor Glass. Her research is being done in Waltham Forest where we are able to offer her facilities and contacts.

/To summarise,

To summarise, we are grateful to the School for the generous welcome they have given us and are glad to see the increasing part taken by the Unit members in teaching.

(b) Association with other Departments and Units

The Department of Education and Science has taken considerable interest in the work of the Unit, and members of the Unit have given oral and written evidence to both the Robbins and Plowden Committees. They were responsible for producing part of Appendix I of the report of the Committee on Higher Education and have produced several working papers at the request of the Plowden Committee, and a paper on the long-term effects of secondary selection at the request of a senior member of the Department of Education and Science.

The Unit has continued to enjoy profitable collaboration with Rothamsted Experimental Station. This has resulted in a number of joint papers, and Mr. H.R. Simpson of the Statistical Department is a joint author of the forthcoming book on the secondary schools. The National Foundation for Educational Research and the Scottish Council for Research in Education have both been closely associated with the work of the National Survey. Mr. Waller of the Air Pollution Research Unit has collaborated in a paper on the relationship between air pollution and respiratory infections in children, and recently we have started a study, with the advice of Professor Arnold Sorsby and Dr. Comer of the National Eye Hospital, into the relation between visual defects and educational performance in the National Survey children.

The Home Office and the Science Research Council are responsible for supporting two of the projects of the Unit, and we have enjoyed the help and collaboration of the staff of both the Home Office Research Unit and the Ministry of Labour in implementing these studies.

The Ministry of Health has an observer on the National Survey Committee and has been able to help us in many ways.

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