Beginning in 1956 about 250 students in two London, England junior schools were intensively studied over a 4-year period for intellectual, educational, emotional, and social development. The schools approached instruction differently; one was child-oriented; the other was subject-oriented. In 1964 this followup study was conducted with some of the same students in the 1956 study who had gone into four secondary modern schools. The students selected for restudy had been of average or below-average reading ability in their junior school. Standardized tests and projective tasks were administered to these students. The measures were similar to those used in the 1956 study. Several questionnaires were completed. The student himself, an interviewer, a teacher, and his parents were informants. The followup data and the data from the 1956 study suggest that questions such as whether a child-centered or subject-centered approach achieve better results are so broad they are almost meaningless. The background and personality of the individual child are very important determinants of school achievement. The data also indicate that the projective tasks used in assessing the student's development are accurate. [Not available in hard copy due to marginal legibility of original document.]
FOUR YEARS ON

by

S. Gooch and M. L. Kellmer Pringle
FOUR YEARS ON

A follow-up study at school leaving age of children formerly attending a traditional and a progressive junior school

by

S. Gooch and M.L. Kellmer Pringle

December 1965
Foreword

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Foreword

In 1956 the senior author (M.L.K.P.) initiated and carried out a longitudinal study of 250 children who had at that time begun attendance at two junior schools in the Midlands. From the age of 7 onwards, various aspects of their intellectual, educational, emotional and social development were explored by means of repeated interviews, tests and other measurements, supplemented by reports from teachers and parents. Until the children left (in 1960) at the age of 11 years to continue their secondary education at other schools some 100 different assessments had been made to chart their progress in relation to two very different school regimes, namely one predominantly child-centred and the other mainly subject-centred. A detailed description of the purposes of this study and of the sample have been given in reports published already.*

The senior author was also responsible for the planning, design and choice of tests and other instruments used in the follow-up study reported here. The field work, including the pilot study, was carried out by Mrs. Joyce Saalmans, assisted by Mrs. G. Burr. The analysis of the data and the drafting of the final report was the task of Mr. S. Gooch who joined the project subsequently. Others involved in a part-time capacity were Mrs. R. Dinnage, Miss J. Gibson and Miss M. Price. We are particularly grateful to Dr. Philip Levy who acted throughout as statistical consultant.

The funds to carry out the follow-up study only became available in the spring of 1964. Neither the funds nor the time available allowed for a re-examination of the total original sample; thus some selection or sampling was necessary. It was decided to concentrate on those children whose reading attainment at the end of their junior school career had been of average or below average standard. This criterion was adopted because reading, especially for comprehension, can be regarded as the most important single predictor of subsequent educational and even vocational progress, the key to academic success. The test by which comprehension attainment was

determined was the Neale Reading Analysis, chosen partly because it is an individually administered and thus probably more reliable instrument; and partly because it is one of the more recently developed and standardised tests. When it had been given to the children as part of an individual interview they already knew the examiners well and were thus at ease.

One by-product of this method of selecting the follow-up sample was that it reduced the number of schools to be visited since it excluded automatically those pupils who had proceeded to selective schools. This was an important practical consideration since the research team was working against time: allowing for designing and piloting of the various tests and measures to be used in the project meant that the majority of children had reached the age of 15 years and were thus in the last term of their secondary modern school life (which marks the end of compulsory schooling). Indeed, some had already left at Easter. Thus the sample was reduced to all those pupils who were either still at school in the summer of 1964 or whom it was possible to trace and persuade to have the psychological interview and tests in the evening after they had returned from work.

Since the sample of children was small, only the most tentative conclusions are justified. At the same time, the availability of data on the children's earlier development and the rather unconventional ways in which the questions of learning and progress, both in the educational and emotional field, have been approached, provided a number of pointers and hypotheses for further, more broadly based studies with larger and more representative samples.

Two conclusions emerge quite clearly and each has far-reaching educational and psychological implications. First, that questions such as whether streamed or unstreamed schools, or whether a child-centred or a subject-centred approach achieve better results are so broad as to be almost meaningless. Instead it need be asked which aspects of children's learning and progress are affected in what ways by different theoretical, organisational and teaching approaches; as well as what the differential effects are on boys and girls respectively and on children of different ability levels and from different socio-economic home backgrounds. In short, the task is to examine the differential effects of different 'educational' treatments not only on different groups of children but also on individual children. The indications from our study are that to ensure the optimal development of all pupils, the educational system needs to become not only more varied so that guidance according to individual need can become a reality; but also that greater breadth and flexibility are needed in teaching methods.
rather than more uniformity and rigidity to ensure the continuation of the growth of slower learning children as well as the fullest social and moral development of all children. For example, some of the essays of quite dull children showed a potential for sensitivity of feeling, emotional insight and a depth of imagination, which were probably unsuspected as well as doomed to remain undeveloped and unfulfilled.

The second conclusion relates to the value of projective material in assessing children's development. Even the comparatively unsophisticated methods employed in this investigation revealed three promising features. The first lies in the fact that when information of a fairly structured kind was gathered from teachers, parents and children themselves, it proved to have an unexpected measure of internal consistency; this suggests that such data have some validity and reliability. Secondly, it looks as if there are stages in personal-social development which can be detected by such projective tasks and which are related both to attainment level and to rate of progress over the years. As would be expected, intellectual level also plays quite a central part. Thus it may well be, that fostering emotional and social potential may prove more conducive to improving a child's rate of learning than concentrating more directly but narrowly on educational progress itself. Thirdly, the projective material and questionnaires are shown to have particular value for the study of children who may have adjustment and learning difficulties. Of course there are pitfalls in a naïve acceptance or precipitate interpretation. But when the supply of trained psychological staff is likely to remain grossly inadequate, at least during the foreseeable future, such devices might become useful screening tools in the hands of teachers with a special interest and training in this field.
Acknowledgements

Permission to carry out the study was readily given by the Directors of Education of the local authorities concerned, namely Mr. J.C. Brooke of Worcestershire and Mr. D. Love of Solihull. Since the work had to be done during the summer term we were particularly appreciative of the willingness of the four head teachers, Mr. R.L. Cooke, Miss H. Rushton, Mr. F. Stanier and Mrs. A.S. York, to make available the time and facilities needed to carry through the research programme. Last, but not least, the ready participation of the boys and girls was a great help and quite a few of them gave up some of their spare time in the evenings to make it possible to complete the work.

Finally, grateful thanks are due to the various bodies who gave these studies the necessary financial support. Funds to carry out the follow-up study reported here were made available by the Department of Education and Science. The analysis of the junior school data was made possible by grants from the Mental Health Research Fund, the Noel Buxton Trust and the Nuffield Foundation.
SECTION 1

THE BACKGROUND OF THE ENQUIRY
SECTION 1.1  The Schools and Children of the Study

The enquiry with which this report is concerned, while on the one hand complete in itself, is at the same time a follow-up study of an earlier, more extensive longitudinal enquiry. The purpose of the original investigation had been to study the intellectual, educational and social progress of a population of junior school children, but more particularly to compare and assess the effects of the very differing approaches of the two junior schools in question to the process of education. The characteristics of these two schools and the reasons for their selection for study are discussed below.

The subjects of the present investigation were a group of children in their final year at four secondary modern schools in the Midlands. These four schools, however, are from the study's point of view accidental rather than central events; in the sense that they existed as facts, these had to be taken into account, but they had in no way determined or directly influenced the structure of the study. The children form the subjects of the present enquiry by virtue of their having once been part of the population of the two junior schools already mentioned. The complete intake of these two schools in one year, namely 1956, was selected at that time for intensive and extensive educational and psychological study over a period of four years, throughout in fact the entire junior school career of the children concerned. Then in 1964, four years after the children had departed variously to grammar, technical and secondary modern schools, funds became available for a follow-up study of a sample of the original population.

In planning and carrying out the follow-up study, the main external shaping factors, apart from purely financial considerations, were the time available (in view particularly of the considerable individual interviewing involved) and the relative accessibility of the children, which together placed severe limitations on the total number of children who could be included. The pupils of the original study were now distributed among numerous secondary schools of all types, including private schools. Any purely random sample of the original population would have involved the research team in relatively extensive travelling and considerable problems of organisation. Fortunately enough, anticipating the need for a selection procedure, the decision had already been taken to centre the follow-up study on the lower end of the attainment range.* The reasoning behind this decision was two-fold. On the one

* For details of the sample, see Section 2, pp.15/16
hand it was felt that the educationally more retarded pupils constitute in many ways the extreme test of an educational system. While, therefore an initial choice was exercised in the decision to follow up those children scoring in the lower 60% of scores on a standardised reading test at 11 years, necessity required the further exclusion of all children who had proceeded to any kind of selective secondary school or who had left the district. As a result of these steps a conceptually homogeneous and an administratively manageable group of children remained, attending a total of only four secondary modern schools.

The time factor nevertheless continued to exert pressure from another direction also. By the earlier part of 1964, when the planning of the study was in progress, the children were well into their fourth year of secondary school, and therefore in the case of the follow-up population, their last year. It could be assumed that the large majority of these children would avail themselves of the opportunity to leave school at 15 years of age, that is, in the summer of 1964.*

However, despite this additional pressure, a pilot test of the material of the study was carried out in a North London school which resulted in some modifications and improvements. The study itself in this final form was carried out in June and July 1964.

The two junior schools of the earlier (1956-1960) study - or to be accurate, of the earlier part of the study, since the former and the follow-up study are of course two parts of one long-term enquiry - are referred to throughout this report as Townsend and Parkside schools respectively. The four secondary modern schools concerned are referred to simply as schools A, B, C and D. The reason for as it were playing down the secondary schools in this way and for the decision to make the frame of reference in general that of the earlier (and, as stated, much larger) enquiry are discussed in detail in Section 1:2, pp. 9/10.

From Townsend junior school the boys of the follow-up population went on to secondary modern school A and the girls to secondary modern school B. These three schools are all in the same neighbourhood. From Parkside junior school both the boys and the girls, with the exception of five boys, went on to secondary modern school C. The five boys mentioned, however, proceeded to secondary modern school D. These three schools are also in one neighbourhood. The two (Townsend and Park-

* A few children in fact left school already at Easter and were interviewed in their own time after working hours.
Localities are separated by a distance of some thirty-five miles.

The names of Townsend and Parkside are, needless to say, not the real names of the schools concerned. However, Townsend, as the name suggests, is situated on the edge of a large industrial town. Parkside school, on the other hand, is in a small country town. That there were differences in local conditions will be readily imagined. There were, moreover, socio-economic differences between the two areas and therefore the two experimental samples.

Parkside is a new junior school on a pleasant estate of terraced council houses. The school has been very specifically designed for its occupants - child-size wash-basins and toilets, for instance - and has large, grassy surrounds which form the playgrounds. Townsend school is of less recent origin and more traditional design, as is the housing area which it serves. This, in the main, consists of semi-detached owner-occupied residences. These differences, important though they probably are, do not however constitute the reason why these two schools were selected for intensive and comparative study. The reason lies in the marked differences between the two schools in terms of their educational beliefs, policies and day-to-day management of school organisation and classroom life.

Before going on to outline these views, it must be emphasised that the Headmasters of the two schools are both very able men. Holding as they do very definite ideas on the theory and practice of education, and convinced of the value of their differing approaches, both have attracted a likewise able, similarly enthusiastic staff, who share their views. There is thus in each school a very positive and integrated atmosphere. On the other side, it would be a mistake to imagine the two Headmasters as narrow or partisan in their views. The suggestion for the comparative study came in fact partly from them. Both were anxious to learn of the relative merits and demerits of their own and each other's approach to the problems of education. To this end they were more than merely cooperative in the venture.

Townsend school practises what might be termed a traditional approach to education (It may be of help to remember that the name of the traditional school begins with T.) Children are streamed on entry to the school at the age of 7. From then on tests and examinations are a regular and prominent feature of school life. Formal class teaching is

* The eleven-plus results of the two schools in terms of the grammar school places available are very comparable.
the main method of imparting information. The value of achievement is stressed and learning takes place in a deliberately competitive atmosphere. This traditional approach to learning has its counterpart in the general life of the school in the emphasis on accepted values, as the following extracts from the school code demonstrate: ‘Always obey immediately. Be polite at all times especially when entering rooms or passing in front of an adult. Keep lavatories and wash-basins clean so that they look as if they have not been used. Make strangers welcome and try to be helpful to them.’

Parkside, on the other hand, adopts what might be termed a progressive approach to education. (It may be of help to remember that the name of the progressive school begins with P.) In this school the children are not streamed, except in the final year before 11+ selection. Prior to this children are grouped simply according to their date of birth so that all classes are of mixed ability. There is no formal school timetable. Most school-work is carried out on a project basis, with children working together in small groups. Learning therefore has an exploratory emphasis. Much scope is given for self-expression, both in the form of free writing and in a wide range of creative art forms. A striking feature of the school is the wealth and high quality of artwork on display. Rules are fewer and far less in evidence than at Townsend. In any case prohibitions are accompanied by explanations. Thus, one should not run in the corridor ‘because it is dangerous’, and not simply ‘because you mustn’t’.

In a certain sense, therefore, Townsend and Parkside may be regarded as forming opposite ends of a continuum. Nonetheless, the aim of each is clearly the same, that is, the production of educated, useful and happy members of society.

Of the four secondary modern schools concerned, only one can be said to continue the approach of either of the junior schools in any direct or clear-cut way. This is secondary modern school A, to which Townsend boys proceeded.

Secondary school A is a very well-run, traditionally orientated school. Many of the features of Townsend are in evidence. The general impression which this school gives is that of a grammar school, not merely in external details like school uniform, but in the demeanour and attitude of the boys.

The remaining three secondary modern schools cannot be said to continue the policies of either junior school. Neither, on the other
hand, can they be said to reverse them. These are middle-of-the-road schools, without the very precise or consistent views that could be described by a generalisation like traditional or progressive. This last statement is not intended to imply a value judgement or a criticism. It is simply that these schools' contribution to the development of their pupils cannot be readily estimated or described in this study's general terms of reference. Like other schools, they have their good and less good points, their able and less able members of staff. What they lack (again, the term is neutral) is an over-riding ethos of the type with which this enquiry is concerned.

The question of the contributions and influence of the four secondary modern schools, which remains, of course, a reality, is further discussed in Section 1:2. pp. 9/10

A note on the socio-economic status of the school populations

To obtain a reasonably objective assessment of the relative socio-economic levels of the Townsend and Parkside populations, parental (i.e. fathers') occupations were sorted into a four-fold classification, namely: Upper Non-Manual, Lower Non-Manual, Upper Manual and Lower Manual. These occupations were reported by the mother in question 22 of the Parental Questionnaire. (See Appendix B)

In assessing whether an occupation fell into the Upper or Lower category, in the case of Manual occupations the amount of skill demanded by the job, together with the training or length of experience needed before the job could be discharged adequately, were the main factors taken into account. However, amount of responsibility involved in the job was also considered. In deciding whether a Non-Manual occupation was Upper or Lower Non-Manual, the degree of responsibility involved was the main criterion used. However, skill and training were also taken into account here as with the Manual categories.

Four judges independently assigned the declared occupations on these criteria to the four classifications described. Cases of non-agreement were subsequently discussed until unanimous agreement could be reached by all four judges. Among the sources consulted for further information in general, and particularly in doubtful cases, was the Registrar General's Classification of Occupations 1960. It can in fact be broadly assumed (a) that Non-Manual: Social Classes I and II of the Registrar General's classification are contained in the present study's Upper Non-Manual category (b) that Non-Manual: Social Classes IV and V

Examples of the present study's classifications are:

Upper Non-Manual: Shop owner, Draughtsman, Factory Manager
Lower Non-Manual: Security Officer, Local Government Clerk, Salesman
Upper Manual: Foreman, Hairdresser (self employed)
Lower Manual: Carpenter
Lorry Driver, Press Operator, Railway Shunter

The percentage distributions of the four classifications in terms of the Townsend and Parkside school areas are given in Table 1. The percentages have been rounded off to the nearest whole number.

<table>
<thead>
<tr>
<th></th>
<th>Upper</th>
<th>Lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Townsend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Non-Manual</td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td>(Manual</td>
<td>41</td>
<td>19</td>
</tr>
<tr>
<td>Parkside</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Non-Manual</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>(Manual</td>
<td>39</td>
<td>59</td>
</tr>
</tbody>
</table>

In assessing this table, note should be taken of the differing local opportunities for employment in the two areas, Townsend being situated by a large town offering more opportunity for non-manual employment. In the much smaller country town men are possibly obliged to turn more to (unskilled) manual work. Nevertheless, while this observation may reduce the significance of the high proportion of Lower Manual workers among Parkside parents, it does not entirely explain it away, nor does it account for the disproportionate division of (all) Upper versus (all) Lower occupations in the two populations. Summatting, it is seen that 55%
of Townsend fathers are in the Upper Division as against 37% of Parkside fathers.

Furthermore, two different aspects of family life are contained in this table, namely income and social class. In terms of income the Upper Non-Manual and the Upper Manual are perhaps best considered together, as against the two Lower groups. In terms of social class the two Non-Manual groups are best taken together over against the two Manual groups. It will be noted that Townsend parents in general have both a better income and a 'higher' social class than Parkside parents.

As a generalisation, and for what these terms are worth, Townsend may be considered to be a more 'middle class' area against Parkside's more 'working class' flavour.

Finally, in further support of this last statement, the distribution of only children in the population can be considered. Small or single-child families are more common in 'middle-class' than in 'working-class' families. Table 2 shows details of the distribution of only children.

**TABLE 2.**

<table>
<thead>
<tr>
<th></th>
<th>Townsend</th>
<th></th>
<th>Parkside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>N=22</td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N=15</td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>6</td>
<td>(27%)</td>
<td>4</td>
</tr>
<tr>
<td>Girls</td>
<td>(27%)</td>
<td>1</td>
<td>(4%)</td>
</tr>
<tr>
<td>Boys</td>
<td></td>
<td>(0%)</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 1.2

The Problem of the Basic Frame of Reference

As mentioned earlier (Section 1.1), Townsend boys went on to one single-sex secondary modern school and Townsend girls to another. Parkside boys and girls went on to one co-educational secondary modern school, with the exception of five boys who proceeded to another, likewise co-educational school. This information, with the actual numbers of children involved, is given in table form below (Table 3).

Table 3
The Pre and Post 11-plus Environments of the Follow-up Population

<table>
<thead>
<tr>
<th>Pre 11-plus</th>
<th>Post 11-plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Townsend girls</td>
<td>School A</td>
</tr>
<tr>
<td>(N = 22)</td>
<td>(N = 22)</td>
</tr>
<tr>
<td>*Townsend boys</td>
<td>School B</td>
</tr>
<tr>
<td>(N = 15)</td>
<td>(N = 15)</td>
</tr>
<tr>
<td>*Parkside girls</td>
<td>*School C</td>
</tr>
<tr>
<td>(N = 24)</td>
<td>(N = 24)</td>
</tr>
<tr>
<td>*Parkside boys</td>
<td>*Schools C &amp; D</td>
</tr>
<tr>
<td>(N = 20)</td>
<td>(N = 15 &amp; 5)</td>
</tr>
</tbody>
</table>

(*co-educational)

The problem, briefly, was whether to base the frame of reference of the study on the pre or post 11-plus character of the population. Clearly neither aspect could be ignored, but there remained the question of emphasis and the practical difficulties of cross-reference between the earlier study and the present one.

The original junior school study has always tended to subdivide and report on the population in terms of the four school-sex groups. With the present study, however, the same approach would produce five school-sex groups instead of four, one of them with the undesirably small N of 5. Apart from any methodological considerations one might predict a certain tendency to confusion when cross-referencing under these conditions. A possibility would have been to dispense with school D altogether, leaving four school-sex groups in the follow-up
study also. Even so, more fundamental methodological objections remain.

The aims and attitudes of the two junior schools, Twonsend and Parkside, are both well-defined and in certain respects at opposite ends of a continuum. This, of course, was one of the reasons why they had been chosen for the purpose of the original study. The four secondary modern schools on the other hand were accidents, i.e. random, uncontrolled events. Nor were their aims and attitudes either so precisely stated or so divergent as had been the case with earlier schools. So that there is a situation of a controlled, experimental arrangement being followed by a pattern of random events. Not, however, quite random. Had the original four school-sex groups proceeded to four different (either co-educational or all single-sex) schools, or had the two Parkside and the two Townsend groups proceeded respectively to only one co-educational school each, some sort of compensated, over-all experimental design based specifically on the follow-up situation might have been possible. As it was, the actual position turned out to be a mixture of these possibilities, namely:

Townsend children went on to two non-co-educational schools
Parkside children (less 5) went on to one co-educational school

These factors, taken together with the fact that this study constitutes a relatively small, expressly follow-up study of a much larger earlier study, decided the research team in favour of referring to the follow-up population in terms of the school-sex groupings of the original study. This should perhaps be regarded as the better of two compromises rather than an ideal solution.

Under this solution, one tends for instance, to lose sight of the fact that the continuous, shared school experiences which these labels imply are an illusion. The junior school groupings effectively ceased to exist from the autumn of 1960 (except, as stated, in the case of the 89% of Parkside children who attended the same co-educational secondary school) It is essential to keep in mind the probable effects of varying secondary school experiences on the two Townsend groups and 25% of the Parkside boys. Reminders of the true position are given throughout the report and of course where possible the effects of the secondary school environment are assessed and reported.

Nevertheless, it should not be forgotten that despite changes of schools the Townsend and Parkside children respectively experience, both throughout the years of junior and secondary modern school, continuity of socio-economic status, and of social and familial environments. These are at least as important in shaping the child's development as any school environment, if not more so as Douglas (1964) and other writers suggest.
Section 1:3

**Validation and Statistical Techniques**

The standardised tests used in the study (see Sections 2 and 3) are assumed to provide valid measures of ability within their respective provinces. On the other hand it can be questioned whether, for instance, asking a parent or teacher to mark a list of maladjustment symptoms provides either a reliable or valid measure of maladjustment; or whether the number of words used by the parent on the parental questionnaire is a valid measure of parental interest.

However, the direct question of the validity of the information provided by the questionnaires (Section 5) and the projective tasks (Section 4) has been deliberately avoided in the sense that no attempt is made to give either a precise definition or an absolute measure of e.g. maladjustment. (The use of such terms is in fact kept to a minimum.) Maladjustment in this study would mean simply the rating obtained by inspection of the appropriate sections of the parental and the school questionnaires. Rejecting precise definitions as a starting point, this study attempts rather to show the associated behaviours and responses which accompany a 'score' or rating of the type described. The aim is to demonstrate patterns or clusters of behaviour. Given as a starting point e.g. a group of high achievers or relative social isolates or whatever else, the task was to establish what behaviours and responses, if any, further typified this group as compared with the remainder of the population.

Nevertheless, while direct validation and precise definition of concepts is expressly side-stepped in this way, the fact that, for example, the children whose parents use the greatest number of words on the Parental Questionnaire are also the children who tend to report that they discuss their problems with their parents; or that the children with generally less adequate social relationships tend also to be the children who do not mention marriage in their retrospective essays and most often conceive old age as being lonely or sad; or that the children achieving the higher maladjustment ratings tend also to be the most notable under-achievers academically, although not necessarily the least intelligent: all suggests that some validity or face-value nevertheless does attach to the concepts as used.
A further strong source of validity is the fact that so often the same trends emerge from the separate sources of information, e.g. from the child's self-report, the school report and the parental report (see Section 5). At present it is fashionable in psychology to emphasise the unreliability of subjective reports and interview data. The question remains, while the ever-present hazards of halo-effect, self-deception, deliberate fraud and the like are fully admitted, whether the extreme position of treating such data as valueless, or largely so, is justified. This study has found an unexpectedly high degree of agreement and reliability where there are two or more subjective responses, from different sources, to similar questions, or where the information could be checked against some more objective measure. This findings lends support to conclusions based on the responses obtained.

No large scale or complex statistical analysis of the data was attempted. The persuasion of the research team is that statistical analysis is of no value unless preceded by and arising out of meaningful hypotheses. Moreover, that to use as a measure of significance arbitrary levels of significance established in and appropriate to an agricultural context is fundamentally unreasonable. As Boyle (1965) has recently argued, in other fields of human activity considerations relevant to the data decide the level of significance. In pharmaceutical research, for instance, a one per cent probability level would be considered a quite unsafe basis on which to take decisions regarding human life.

In the present enquiry the authors have been content, in the main, merely to show the trend or direction of results, without preoccupying themselves unduly with the magnitude of the differences. A series of results in a predicted direction is felt, however, to be strongly supportive for the hypothesis concerned, even where the individual differences are small. The norms (not merely in the statistical sense) implicit or explicit, on which comparisons are based are in every case those of the actual population as established by inspection, and not national norms.

Some statistical tests of significance have nevertheless been used, particularly in Section 3, which, being concerned with performance on standardised measures of attainment, lends itself to such treatment. Also in Sections 4:3 and 4:4, which were prepared for separate publication in Journals where statistical analysis is a requirement.
References (Section 1)


SECTION 2

SUBJECTS AND METHODS
SECTION 2

Subjects and Methods

From an original population of 262 boys and girls at two junior schools who were intensively studied between the ages of 7 and 11 years (1956-60) by means of a large variety of intelligence, attainment and personality tests, including structured but informally conducted interviews and detailed questionnaires to parents and teachers, a follow-up sample of 81 children aged fifteen years (in 1964) was given further tests and re-tests of a similar kind. The two junior schools were originally chosen by reason of their respective 'progressive' and 'traditional' approaches to the process of education.

The follow-up sample consisted basically of those children scoring in the lower 60% of scores on the Neale Analysis of Reading Ability at the age of eleven. This method of selection produced initially a population of 143 children. Considerations of accessibility and the limited time available necessitated the further elimination from the sample of three groups of children: those attending any kind of selective secondary schools (N=23); those in private schools (N=2); and those who had left the district (N=9). These steps produced a sample of 109 children. From this group were further lost those who had already left school and were unwilling to attend for testing in the evening (N=28). The final population tested consisted therefore of 81 children, namely 46 girls and 35 boys, attending four secondary modern schools.

Details of the population distribution of the final 81 children by schools past and present were as follows: from the first junior school, Townsend (N of boys 15, N of girls 22) all the boys proceeded to single-sex secondary school A and all the girls to single-sex secondary school B; from the second junior school, Parkside (N of boys 20, N of girls 24) all the girls and 15 of the boys proceeded to co-educational secondary modern school C, while the remaining 5 boys went on to co-educational secondary modern school D. A summary of population distribution at 11 and 15 years is given in Table 4.

The children were tested for the most part in their own schools during normal school hours. However, 8 children who had already left school agreed to attend for testing on school premises during their own time in the evening.
Table 4

Summary of Population Distribution at 11 and 15 years

<table>
<thead>
<tr>
<th></th>
<th>GIRLS</th>
<th>BOYS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Townsend Junior School</td>
<td>22</td>
<td>15</td>
<td>37</td>
</tr>
<tr>
<td>*Parkside Junior School</td>
<td>24</td>
<td>20</td>
<td>44</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>46</td>
<td>35</td>
<td>81</td>
</tr>
</tbody>
</table>

|                         |       |      |       |
| Ex Townsend             | -     | 15   | 15    |
| School A                |       |      |       |
| (Secondary Modern)      |       |      |       |
| Ex Parkside             | 24    | 15   | 39    |
| School C                |       |      |       |
| (Secondary Modern)      |       |      |       |
| (School D               | -     | 5    | 5     |

**Total** 46 35 81

(*co-educational)

The tests and instructions for their administration are described in the appropriate Sections and in Appendix B. A summary of all measures is given in Table 5. These consisted of three standardised tests of attainment*, four projective tasks and four questionnaires. Additionally, since no general test of ability was administered in the follow-up (when the children were 15 years old) the Cornwell Intelligence Test Quotients obtained at 11 years of age are used as an index of measured intelligence.

* The WISC Vocabulary sub-test of the Wechsler Intelligence Scale for Children is here treated primarily as a measure of language skill.
Table 5

Summary of Measures Used at 15 years

<table>
<thead>
<tr>
<th>Order of Presentation (where appropriate)</th>
<th>Standardised Tests (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(9)</td>
<td>WISC Vocabulary Sub-test (15 minutes)</td>
</tr>
<tr>
<td>(6)</td>
<td>Vernon Arithmetic/Maths (20 minutes)</td>
</tr>
<tr>
<td>(2)</td>
<td>N.F.E.R. Secondary Reading 2 (40 minutes)</td>
</tr>
<tr>
<td></td>
<td>Projective Measures (4)</td>
</tr>
<tr>
<td>(7)</td>
<td>Best Moment of My life (10 minutes)</td>
</tr>
<tr>
<td>(3)</td>
<td>Ideal Person (10 minutes)</td>
</tr>
<tr>
<td>(4)</td>
<td>Most Wicked Deeds (10 minutes)</td>
</tr>
<tr>
<td>(5)</td>
<td>Retrospective Essay: Looking Back on my Life (40 minutes)</td>
</tr>
<tr>
<td></td>
<td>Questionnaires (4)</td>
</tr>
<tr>
<td>(1)</td>
<td>Children's Questionnaire (15 minutes)</td>
</tr>
<tr>
<td>(8)</td>
<td>Individual Interview (30 minutes)</td>
</tr>
<tr>
<td>(-)</td>
<td>Confidential School Report (-)</td>
</tr>
<tr>
<td>(-)</td>
<td>Parental Questionnaire (-)</td>
</tr>
</tbody>
</table>
SECTION 3

THE STANDARDISED TESTS
The original study had established, in terms of intelligence as measured by standardised tests, that of the four school-sex groups, namely Townsend girls (TG), Townsend boys (TB), Parkside girls (PG) and Parkside boys (PB), the Townsend girls constituted the brightest group and Parkside boys the dullest. On investigation this was found also to be true of the follow-up population. Mean I.Q. figures for the four school-sex groups of the follow-up sample are given in Table 6.

Table 6

Mean Cornwell I.Q.'s (at 11 years) of the follow-up population.

<table>
<thead>
<tr>
<th>Group</th>
<th>I.Q.</th>
<th>s.d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG (N=22)</td>
<td>100.0</td>
<td>11.4</td>
</tr>
<tr>
<td>TB (N=15)</td>
<td>98.2</td>
<td>12.8</td>
</tr>
<tr>
<td>PG (N=24)</td>
<td>96.5</td>
<td>12.7</td>
</tr>
<tr>
<td>PB (N=20)</td>
<td>91.5</td>
<td>11.3</td>
</tr>
</tbody>
</table>

A one-way analysis of variance performed on these figures showed the differences to be non-significant statistically. One might nevertheless expect some performance differences, at least between the extreme groups.

Two points arise in connection with this table. It will be noted firstly that the I.Q.'s obtained four years earlier when the children were 11 years of age in 1960 have been used since no general test of intelligence was given in the present study, i.e. at age 15 years.

The second point arising in connection with this table and indeed with subsequent tables is that it cannot by any means be assumed that the characteristics of the follow-up population, taken alone, between the ages of 7 and 11 years (1956-60) are identical with the characteristics of the total parent population during that period. A number of instances were found where this was not the case, nor is it surprising since the follow-up group was not a random sample of the
parent population but taken from the lower end of the attainment range (The procedure used in selecting the follow-up population is described in Section 2) Therefore in all cases where a comparison with earlier performance was required the earlier data was re-worked in terms of the present follow-up population alone.

Attainment

Table 7 shows average differences in performance at 15 years on the three standardised tests used in the follow-up. Standard scores (S/S) are given for the WISC Vocabulary test, while for the Vernon Arithmetic-Maths test and the N.F.E.R. Secondary Reading Test 2 raw scores (R/S) only are reported, in the absence of adequate standardised scores.

A one-way analysis of variance showed all these differences to be significant at the levels indicated.

On each of these three tests Townsend boys achieve the highest mean score, with Townsend girls in second place.

Already, some admittedly very tentative conclusions may be drawn from a comparison of Tables 6 and 7. Since the mean differences in measured I.Q. between groups when tested by one-way analysis of variance were not significant, whereas the performance differences were (in some cases highly so), it seems that individuals in the two schools are achieving differentially in terms of their potential. An analysis of co-variance would, however, be required to settle what remains only a supposition at this point. A further tentative conclusion is that Townsend, taken together with the positive or negative effects on the children of four years' subsequent secondary modern experience, appears to have made rather more of its children's potential than has Parkside, again 'plus' or 'minus' four years of subsequent secondary modern schooling. However, it must first not be overlooked in putting forward these conclusions that four years have elapsed between the administering of the Cornwell intelligence test at 11 years and the administering of the attainment measures at 15 years of age; and that some I.Q. change may take place over such a period. Secondly, the suggestion that more has been made of the Townsend potential than of the Parkside potential is both a generalisation and, as will be shown later, a considerable oversimplification. For the moment it should be remembered that Townsend children started out with a (mean) I.Q. advantage over the Parkside sample; more importantly that the former also have socio-economic advantages, whose effects are probably considerable; and not least that academic achievement is only one facet of a school's contribution to the development
<table>
<thead>
<tr>
<th>Table 7</th>
<th>Mean scores of the four school-sex groups on three standardised tests at 15 years (1964)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TG(N=22)</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
</tr>
<tr>
<td>***WISC Vocab. S/S 1964</td>
<td>8.9</td>
</tr>
<tr>
<td>s.d.</td>
<td>2.4</td>
</tr>
<tr>
<td>**Vernon Arith.-Maths R/S 1964</td>
<td>35.7</td>
</tr>
<tr>
<td>s.d.</td>
<td>8.5</td>
</tr>
<tr>
<td>*N.F.E.R. Sec. Reading 2 R/S 1964</td>
<td>20.2</td>
</tr>
<tr>
<td>s.d.</td>
<td>5.5</td>
</tr>
</tbody>
</table>

* Differences significant, P < .05  
** Differences significant, P < .01  
*** Differences significant, P < .001
of its pupils.

Two of the three tests, namely the WISC vocabulary and the Vernon Arithmetic-Maths test, were also taken by the children four years earlier while still in junior school. (Instead of the NFER Secondary Reading Test, more appropriate tests of reading ability were applied at that time) The results of this earlier testing are given in Table 8.

Table 8
Mean scores of the four school-sex groups in two standardised tests at 11 years (1960)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TG(N=22)</td>
<td>10.3</td>
<td>30.7</td>
</tr>
<tr>
<td>TB(N=15)</td>
<td>10.8</td>
<td>32.0</td>
</tr>
<tr>
<td>PG(N=24)</td>
<td>9.5</td>
<td>26.9</td>
</tr>
<tr>
<td>PB(N=20)</td>
<td>9.2</td>
<td>25.2</td>
</tr>
</tbody>
</table>

It will be seen that the relative positions of the sub-groups in relation to each other at this time are in no way different from those of the later performances shown in Table 7, although the differences between groups are smaller. It would therefore appear safe to say that, whatever else, the secondary modern school treatments which the children have variously experienced, have failed to alter the rank order of achievement on these two tests as it existed before the child entered secondary school.

At this point the question of progress and its measurement arises.

Progress as assessed on test/subsequent re-test

If a child is given the same test more than once, it is possible to calculate progress made by comparing the scores obtained on different occasions. This practice seems inherently reasonable and is in fact the model commonly employed both in schools and elsewhere. However, the unthinking acceptance and application of the model seems open to very serious methodological objections and these will be discussed below. In addition an alternative model will be proposed.
First, however, the test/re-test data will be presented and discussed in the usual manner for this type of material.

A comparison of Tables 7 and 8 yields the following performance differences at 11 and 15 years on the WISC Vocabulary and the Vernon Arithmetic/Maths tests (shown in Table 9)

<table>
<thead>
<tr>
<th>Table 9</th>
<th>Mean differences between scores on test and re-test for the school-sex groups on two standardised tests at 11 and 15 years (1960-64)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TG(N=22)</td>
</tr>
<tr>
<td>Mean Diff. WISC S/S 1960-64</td>
<td>-1.4</td>
</tr>
<tr>
<td>s.d.</td>
<td>1.7</td>
</tr>
<tr>
<td>Mean Diff. Vernon R/S 1960-64</td>
<td>+5.0*</td>
</tr>
<tr>
<td>s.d.</td>
<td>4.0</td>
</tr>
</tbody>
</table>

*P=.001

The between-group differences in respect of the Vernon test are significant at the .001 level. The four groups, therefore, appear to be progressing at different rates, at least on the very simple model of progress used here. The between-group differences on the WISC sub-test are not statistically significant. Nevertheless, the drop in performance on this test is itself significant at the .05 level in each case, that is, when the score at 11 years is compared (by correlated t-test) with the score at 15 years for each sub-group.

The deterioration in WISC scores by all groups is a matter for comment. At face value the evidence is that during the four years of secondary modern school these children's ability to define words has declined. Theoretically, the drop in standard score could mask an inadequate but nonetheless positive increase in the raw scores. However, in a number of cases there was a drop also in raw scores, which inescapably implies that the child concerned can apparently no longer define a word which he has previously defined satisfactorily.

Are there any mitigating circumstances to this discouraging
picture? There appear to be some. Reverting to standard scores, it should be remembered that the WISC was constructed for and standardised on an American population. This list of words for definition in the Vocabulary sub-test includes some whose frequency and usage probably differs from America to England. This fact has been recognised and the list partially revised for British use, e.g. shilling is substituted for dollar. However it is likely that the revision is incomplete and that the effect of slightly differing American usage, especially in the case of the more difficult words, is to lower the 'ceiling' (i.e. the maximum score obtainable) of the test for the British child. If this is true then scores standardised on a British population might for this reason be rather lower than those obtained by standardising on an American population.

There remains the matter of the lower raw scores. It may be that the adolescent child at 15 years is able to verbalise less easily or is generally more embarrassed by the testing situation than the eleven-year old. (The test is after all administered individually, face-to-face) Such factors might inhibit the demonstration of the child's real potential.

It seems nevertheless unlikely that a drop in score instead of the expected rise can be entirely accounted for by these considerations.

On the Vernon Arithmetic/Maths test both groups of boys are making more progress than both groups of girls, which is expected for this type of population at this age (Biggs 1962). However, the record of the Parkside boys is actually poorer than Table 9 alone might lead one to suppose. A more accurate picture is formed by inspection of Table 10.

The Vernon test was administered to the population altogether on four separate occasions: at 9 years, 10 years, 11 years and 15 years of age. Table 10 shows the mean figures for the school-sex groups in terms of attainment and progress. The progress score is the difference between a score on one occasion and the score on the next subsequent occasion. Only those children have been included who took the test on all four occasions (N=63). Hence the numbers of children and certain results differ from those of earlier tables.

No statistical test of significance was carried out on these
Table 10

Mean attainment and progress scores of the four school-sex groups on Vernon Arithmetic/Maths between age 9 years and 15 years (1958-1964)

<table>
<thead>
<tr>
<th>At:</th>
<th>TG (N=15)</th>
<th>TB (N=11)</th>
<th>PG (N=20)</th>
<th>PB (N=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 yrs (1958)</td>
<td>18.2</td>
<td>17.4</td>
<td>15.4</td>
<td>13.5</td>
</tr>
<tr>
<td>10 yrs (1959)</td>
<td>25.7</td>
<td>27.2</td>
<td>22.2</td>
<td>19.6</td>
</tr>
<tr>
<td>11 yrs (1960)</td>
<td>30.4</td>
<td>32.0</td>
<td>28.2</td>
<td>25.1</td>
</tr>
<tr>
<td>15 yrs (1964)</td>
<td>34.9</td>
<td>45.7</td>
<td>35.6</td>
<td>33.3</td>
</tr>
</tbody>
</table>

Progress

<table>
<thead>
<tr>
<th></th>
<th>TG (N=15)</th>
<th>TB (N=11)</th>
<th>PG (N=20)</th>
<th>PB (N=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-10 (1958-1959)</td>
<td>+7.5</td>
<td>+9.8</td>
<td>+6.35</td>
<td>+6.2</td>
</tr>
<tr>
<td>10-11 (1959-1960)</td>
<td>+4.7</td>
<td>+4.8</td>
<td>+5.95</td>
<td>+5.5</td>
</tr>
<tr>
<td>11-15 (1960-1964)</td>
<td>+4.5</td>
<td>+12.8</td>
<td>+7.45</td>
<td>+8.2</td>
</tr>
</tbody>
</table>

figures. However, some comparison is possible with earlier tables where significance was obtained.

Considering firstly Parkside boys, it will be noted that on all four attainment testings they achieve a lower score than Parkside girls. In other words not only throughout junior school, but also after four years of secondary modern experience. (They also progress at a slower rate than Parkside girls, except in 1964 where a slight gain over the girls is in evidence.) This picture is contrary to expectation from what is known on sex differences in regard to mathematics (Biggs 1962).

Summarising research in this field Biggs states that at 10+ girls still perform better than boys both at mechanical and problem arithmetic. Thereafter, in the secondary modern situation, boys gradually overtake the girls 'so that at 14+ the differences in mechanical
ability have virtually disappeared, while in problem arithmetic the boys are very much superior."

On this basis one would expect a group of boys of roughly equal intelligence to a group of girls (actually the latter have the advantage of an average of 5 I.Q. points over the boys) and sharing the same school environment, to overtake those girls between the ages of 9 to 15 years and be fairly well ahead of them in the final analysis.

While this is found to be the case for Townsend children, it is clearly not the case for the Parkside population, where even at the age of 15 the mean attainment score of Parkside boys is below that of Parkside girls. (Only in terms of progress are Parkside boys at last beginning to show signs of the expected sex differences) The two Townsend groups (where again the girls have a slight mean I.Q. advantage over the boys) behave according to prediction, with Townsend boys 'very much superior' to the girls at the end of the period in question.

Before explanations are attempted one other facet of Table 10 should be brought out. In the junior school Townsend girls have initially higher attainment scores on arithmetic than Parkside girls, and in the first instance make greater progress. After the first year, however, Parkside girls make greater progress than the Townsend group, until finally at the age of 15 the attainment level of Parkside girls is above that of Townsend.

With regard to progress in the junior school, the hypothesis was put forward that a progressive school environment (Parkside) is favourable to the development of mathematical ability in girls, but unfavourable to its development in boys. Conversely, that a traditional school environment (Townsend) will favour the development of mathematical ability in boys but be unfavourable to its development in girls.

This hypothesis accounts adequately for the pattern revealed by the junior school data, both in respect of attainment and progress. The hypothesis runs into difficulties thereafter, since it is not possible to use the descriptive terms 'progressive' or 'traditional' in respect of three out of the four secondary schools. Three schools, in other words, do not specifically continue the policies of the junior schools. Nevertheless, while the three secondary schools cannot be said to continue the policies of the junior schools, neither can they be said to reverse them.
It is of the greatest interest that in the one instance where a secondary modern school (namely secondary school A) does continue the, in this case, traditional approach of the junior school concerned (namely Townsend), the hypothesis is dramatically borne out. The record of Townsend boys as seen from Table 7 speaks for itself. For a graphic visual demonstration of the striking performance of Townsend boys in relation to the other three school-sex groups, Figures 1 and 3 (pp. 34 and 37) should be inspected. It may, of course, be merely coincidence that the allegedly beneficial effects of a regime are continued in the one case where the secondary school concerned offers a similar regime; and that the three 'neutral' schools fail either to reverse or accelerate the existing trends*. This, however, is perhaps unlikely. A more serious objection to the hypothesis advanced is the possibility of alternative explanations. For instance, socio-economic and other differences exist between the Townsend and Parkside populations and these could account for the observed differences in attainment. The present authors would not in fact challenge such an alternative hypothesis unless offered as a total explanation, as opposed to an additional one**. Supporters of this view as a total explanation would need to account, among other things, for the 'coincidence' of Townsend boys' outstanding performance and the continuity of school treatment which they experience.

When one speaks of a progressive or traditional environment favouring or not favouring the development of mathematical ability in boys or girls, one is not, of course, implying some mystical change in brain mechanism or capacity. The implication is rather that under certain conditions certain children are motivated or permitted to perform more in terms of their full potential than at some less adequate level.

In this case one might reasonably, as a first corollary, look for similar differences in other school subjects. However, the remaining (though longitudinally less extensive) data on the WISC Vocabulary test and the N.F.E.R. reading test does not entirely bear out this supposition in the sense that Townsend girls have actually higher attainment levels.

* To settle the matter to the satisfaction of experimental psychology would require of course (matched) groups experiencing the two conditions in all possible combinations, i.e. traditional treatment followed by (further) traditional treatment, traditional followed by progressive, progressive followed by progressive and progressive followed by traditional.

** The present study actually assumes an interaction of school treatment and home environment, but is not, generally speaking, in a position to make precise statements about the relative importance of these two factors.
than Parkside girls. Townsend boys, nevertheless, continue to achieve better scores than Townsend girls in these non-mathematical areas where sex differences would tend, if anything, to favour girls, while Parkside boys continue to perform at their former rather depressed level. The relative positions of Townsend and Parkside girls on the verbal tests may possibly be due to the distorting or depressant effects of Bernstein's (1962) 'private' language among the more purely working-class population, namely Parkside, on verbal measures.

One might perhaps also expect these differences to carry over to some extent into social relationships, self-image, life-style and areas of this kind. In so doing one is postulating the existence of some type of vicious and benign circles. The suggestion is that the child who is doing (relatively) well at school subjects will tend to be more successful generally: to have a better relationship with parents, more adequate social relationships generally, greater maturity, more realistic self-image and so forth. Fortunately this study has a great deal of information in these directions and later sections (Sections 4 and 5) will attempt to show the above reasoning is substantially correct. Townsend girls and Parkside boys are seen to constitute somewhat deviant groups.

Reverting to the more purely educational aspects of the data, one other feature of Table 10 deserves further attention and that is that all four groups make less progress between the ages of 10 and 11 (1959-60) than they do between the ages of 9 and 10 (1958-59). The interesting point is that the former period is the year of the eleven-plus examination and incidentally the first year in which Parkside children were streamed for ability. Under these conditions one might have expected greater increase in mathematical progress in this year than in the previous year. Such is not the case.

Possible explanations are that perhaps the final year before the eleven-plus is spent in consolidating the ground already covered rather than in breaking new ground; or, since the eleven-plus examination was already over when the Vernon was administered in that year, there was lower motivation to do well. Should such explanations be shown to be inadequate, the possible effects of anxiety might be considered. Already since the time of the Yerkes-Dodson law it has been generally agreed by psychologists that anxiety acts as a drive to increase performance on simple tasks but acts adversely on performance on complex tasks. The amount of anxiety which is 'beneficial' decreases regularly and in proportion to the increase in complexity of the task. Bearing in mind that these findings were obtained under controlled laboratory conditions whereas what is now being considered is a real-life and far less control-
led situation, the position with regard to the lowered rate of progress in the eleven-plus year could be stated as follows: that the last year in the junior school courses arouses higher-than-normal anxiety in these children (as stated, the Parkside children were streamed for the first time in that year) while the tasks they were asked to perform tended to be more difficult than those of earlier years; hence on the basis of the experimental evidence performance decrement would be expected. Since the follow-up sample consists of children with lower than average attainment, greater anxiety during the decisive year of the 11+ examination might also be predicted. This aspect of the data would appear to deserve further consideration by future workers.

Criticisms of the standard model of progress

Returning to the question of measurement of progress, there are a number of objections to the naive acceptance and application of the customary standard model of progress, based on improvement between test and re-test.

Ideally any test used in a long-term longitudinal study should be capable of dealing with a wide range of ages and abilities; that is, it needs a sufficiently higher 'ceiling' to accommodate older and/or very able children on the one hand and a sufficiently low base line to accommodate very young and/or very dull children on the other. Moreover, the test must distinguish adequately between children at the upper and lower extremes - there should be no bunching in the sense of an increase in tied scores.

In practice most of the tests available do not meet these criteria. Here only the effects of test-ceiling on progress will be considered, but obviously similar considerations apply at the other end of the scale.

Where a test has a ceiling, that is, where it is possible for a child to achieve maximum possible marks, then amount of progress will depend to some extent on starting distance from that ceiling. To take a very simple example: given that a test has a possible maximum score of 10 and two children score respectively 7 and 5 points out of 10 on the first testing occasion, then clearly the second child has a greater possibility of making progress than the first. Yet the first child is actually the more able of the two, to judge by the higher score on first testing. Furthermore, for a variety of reasons, rate of progress tends to be slower as the ceiling is approached. (This is demonstrated by the
flattening of the normal learning curve towards the asymptote. Consequently more effort is required to increase one's score by 5 points towards the end of such a test than is required for a similar increase in the middle or at the beginning of such a test. (The question of initial differences in intelligence level in the children concerned is ignored for the moment)

A further relevant question, apart from the possible ceiling of the test, is that of the child's own personal 'ceiling' or maximum potential. If a child is working at or near his own ceiling his progress will tend to be less dramatic when compared with that of a person who for any reason suddenly capitalises on his potential. A boy, for instance, who was hitherto lazy or antagonistic may on the advent of a new master make very rapid progress for a time until reaching a level near his maximum.

Other aspects of this total question which deserve to be considered are whether a score increase of ten points near the centre of the scale represents the same achievement for a bright boy as for a duller boy in terms of hours of study or psychological effort. Common-sense suggests that this is not the case. So far no method has been devised to calculate just how much more difficult this is for the dull than it is for the bright child.

This raises the basic question of differences in learning capacity or intelligence.

Educationalists and psychologists are perhaps still in some ways inclined to treat measured I.Q. as some kind of independent constant. In effect a score on an intelligence test is itself open to all the objections to and shortcomings of tests in general discussed above. The difference between 80 and 90 I.Q. points may not be the 'same' as the difference between 120 and 130 I.Q. points.

Alternative models of progress apart from the test/re-test comparisons do however exist. The remainder of this section is devoted to explaining and applying one of them.

An alternative model of progress

Given that a particular population has two sets of scores, X
and Y (either for two different tests or the same test on two different occasions) if and when these are correlated, X may be said to predict Y, either in the sense that X precedes Y chronologically or that it precedes Y conceptually. (By this definition it is clearly just as possible to 'predict' X from Y.)

The regression equation

\[ \hat{Y} = b_YX - b_YX - Y \]

calculates the best estimate (\(\hat{Y}\)) of the actual achievement scores (Y) as the basis of knowledge of X (and making the assumption of a linear relation between X and Y). The difference (D) between predicted achievement (\(\hat{Y}\)) and actual achievement (Y) provides then one way of showing relative progress within a group.

D has the useful property of being, by construction, unrelated to the initial predictor variable (X). Thus if X were an I.Q. score and Y a score on an attainment test, the D obtained (i.e., the measure of progress) would be unrelated to I.Q. In this sense one could be said to have equated for varying levels of intelligence.

This method of predicting attainment on the basis of measured I.Q. was applied to the data of the present study. D scores (difference or discrepancy scores) may of course be positive or negative, and one can therefore speak of 'over' or 'under-achievement'. Over-achievement as used here indicates that an individual, in some cases a group of individuals, is making more of his potential than other individuals of similar intelligence. Under-achievement, conversely, refers to an individual making less of his potential than others of similar intelligence.

Results and discussion of the alternative model

In calculating the regression coefficient b (in this case \(b_Y\), the major item in the formula given above, the correlation coefficient is also produced. Table 11 shows the correlation and regression coefficients of the four school-sex groups for the three standardised tests on Cornwell I.Q.
Table 11

Correlation and regression coefficients of three standardised tests at 15 years on Cornwell I.Q. at 11 years

<table>
<thead>
<tr>
<th></th>
<th>TG (N=22)</th>
<th>TB (N=15)</th>
<th>FG (N=24)</th>
<th>PB (N=20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISC Vocab.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S/S 1964</td>
<td>.7</td>
<td>.1586</td>
<td>.6</td>
<td>.1430</td>
</tr>
<tr>
<td>Vernon Arith/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maths R/S 1964</td>
<td>.8</td>
<td>.6059</td>
<td>.8</td>
<td>.7980</td>
</tr>
<tr>
<td>NFER Sec.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading 2</td>
<td>.7</td>
<td>.3418</td>
<td>.8</td>
<td>.3530</td>
</tr>
</tbody>
</table>

As stated elsewhere, the Cornwell I.Q.'s used are those obtained when the present population of 15 year olds were 11 years of age. Moreover, this test is designed expressly for children aged 8 to 11 years. There was, therefore, initially some doubt in the minds of the research team as to the validity of using these I.Q.'s to predict or evaluate performance at 15 years of age. However, the high correlations obtained in some cases (namely .8) suggest that this intelligence test can act as a reliable predictor of later performance, and that the fact that the correlations are in other instances relatively low is not due to a methodological weakness of this kind.

The variations in correlation obtained are interesting. Direct comparisons between correlations are nevertheless only possible when the standard deviations agree within certain limits. What the correlations do indicate is that the exploitation of the Parkside children's potential has been less consistent than that of the Townsend children. In other words, that in the Parkside group either the brighter children are producing relatively low attainment scores, or the dull children relatively high scores, or possibly both.

A clearer and more detailed picture is provided by the
regression coefficients. The regression coefficient expresses that fraction by which the predicted Y score increases per unit of X, on the basis of best fit of a regression line of Y on X. In the present case the regression coefficient shows the amount of exploitation in terms of attainment (Y score) per unit of intelligence (X score).

Plotted regression lines based on these coefficients for predicted Vernon Arithmetic/ Maths scores are shown graphically in Figures 1, 2 and 3, for predicted WISC Vocabulary score in Figure 4 and for predicted N.F.E.R. reading score in Figure 5. (pp. 34, 35, 37, 38 and 39)

The larger the regression coefficient, the steeper the regression line: the smaller the regression coefficient, the more nearly horizontal the regression line. In the present case the steeper line indicates relatively greater realisation of the potential of the brighter members of a group, as compared with the duller children of that group. This, however, is only one aspect. The position of the regression line (relative to other regression lines) is also important. Wherever one regression line lies above another, the achievement is in every case greater, regardless of the degrees of slope of the two lines.

Reference to Figure 1 shows that the plotted regression line for Townsend boys is steeper than that for Townsend girls, indicating differential rates of development of potential for dull and brighter children between boys and girls, in respect of mathematics. Moreover, the regression line for boys lies entirely above that for girls. At no point do the lines cross. Therefore Townsend boys are over-achieving relative to the girls at every level of intelligence. This is not unexpected in view of what is known concerning sex differences in mathematics.

Where regression lines cross, as in Figure 2, the interpretation becomes conditional. In Figure 2, while the line for Parkside boys initially lies above that for Parkside girls, the slope of the girls' regression line is steeper, so that it eventually rises above that of the boys. The analysis of this situation is that while the duller boys 'over-achieve' against the duller girls of similar intelligence, the brighter boys 'under-achieve' relative to the brighter girls. Thus the expected sex-differences favouring boys (seen dearly in Figure 1) are not found at Parkside, at least not among the brighter children. In the case of Townsend the regression lines are divergent, in the case of Parkside they are convergent. On this model of progress also therefore, as with the conventional model, there is evidence that Townsend provides a more favourable setting for the development of mathematical ability in boys, Parkside for its development in girls.
FIGURE 1. REGRESSION OF VERNON ARITHMETIC/MATHS SCORE ON MEASURED INTELLIGENCE FOR TOWNSEND

Vernon Arithmetic/Maths

Cornwell I.Q.
FIGURE 2. REGRESSION OF VERNON ARITHMETIC/MATHS SCORE ON MEASURED INTELLIGENCE FOR PARKSIDE
Figure 3, however, provides a rider to this statement. It shows the four regression lines so far discussed on one graph. It will be noted that the regression lines of the two groups of boys cross at the lower end. Despite Townsend boys' outstanding general performance, it appears that the very dull boy nevertheless actually does better in mathematics at Parkside than at Townsend. This is of great general interest and would possibly not have come to light on a conventional model of progress, where individual scores are not corrected for initial level of potential - in the present case, measured I.Q.

It is clear that there is no simple answer to the question: which approach, traditional or democratic, favours the better development of mathematical ability in children? Ignoring for the moment the socio-economic differences between the two populations, the answers to this question appear to be as follows. Boys as a whole, including the somewhat duller boy, benefit from a traditional approach. Very dull boys, however, do better under a progressive regime. Girls in general do better in the progressive set-up, but the very bright girl tends to benefit more from the traditional approach. (Naturally these statements must be understood to apply only to the children of this study, in the first instance. Moreover, the terms dull, duller, bright, brighter, used here are relative to the secondary modern situation. The follow-up study has no information regarding the grammar and technical school sections of the original study.)

Figure 4 shows the regression of WISC Vocabulary score on Cornwell I.Q. for all school-sex groups. Somewhat surprisingly, there appears to be a sex-linked difference in favour of the boys, with Townsend boys over-achieving at all levels against Townsend girls, and Parkside boys over-achieving at all levels against Parkside girls. Furthermore, the duller Parkside boys over-achieve as compared with the duller Townsend girls. These findings are particularly surprising in the case of Parkside boys, since on the conventional model of progress (and attainment) as shown in Table 10 these boys appear to be under-achieving. It seems that different models of progress do not always present by any means the same picture. This point is taken up again below.

Figure 5 shows regression of N.F.E.R. reading score on Cornwell I.Q. Here again the consistently high degree of realisation of potential by Townsend boys as compared with all other groups is once more in evidence. Of further interest is the performance level of the duller Parkside boys, which is above that of both Townsend and Parkside girls. However, the more intelligent Parkside boys repeat the pattern of under-achievement which was in evidence (to a lesser extent) in Figure 3 in
FIGURE 3. REGRESSION OF VERNON ARITHMETIC/MATHS SCORE ON MEASURED INTELLIGENCE FOR ALL GROUPS

Vernon Arithmetic/Maths

60
55
50
45
40
35
30
25
20

70 75 80 85 90 95 100 105 110 115 120

Parkside Boys
Townsend Girls
Parkside Girls
Townsend Boys
FIGURE 4. REGRESSION OF WISC VOCABULARY SCORE ON MEASURED INTELLIGENCE FOR ALL GROUPS
FIGURE 5. REGRESSION OF N.F.E.R. SECONDARY READING TEST 2 ON MEASURED INTELLIGENCE FOR ALL GROUPS
In general one must probably assume that the two verbal measures in particular favour Townsend, in that this is a more 'middle-class' population. It is probable that in the average Townsend home there are greater numbers of books, a stronger tradition of reading and a better level of day-to-day vocabulary (assuming relatively better educated parents) than in the average Parkside home. This climate, of course, would tend to facilitate attainment in general. Therefore it is the more remarkable when, for instance, Parkside girls over-achieve against Townsend girls. Even where Parkside under-achieves, some allowance should be made for the negative influence of relatively more unfavourable home backgrounds, which constantly exercise a greater braking effect on the efforts of the school than do some other environments. It is easily overlooked that in very unfavourable conditions even staying in the same place is a positive indicator.

If a generalisation is to be made concerning figures 1 to 5, it is that, in the population studied, the brighter child does better under the traditional approach, to some extent at the expense of the duller child, while the duller child does better under the progressive regime at the expense of the brighter child. The matter of which of these two results is the more desirable is a social and political rather than a scientific question. As such, its answer rests necessarily on a value judgement. If one's aim is the production of 'experts', the traditional approach will be commended. If one believes that dull children must be given an equal, or even a more than equal chance, the progressive system will be favoured.*

From the broad point of view neither the progressive nor the traditional system is satisfactory. Both are wasteful of undeveloped potential, and neither fulfils the dictum of 'to each according to his needs'. It would seem that at least two approaches to education must co-exist if a rational and just system is ever to come into being.

* In this connection, a question which has not been considered is that of the identification of a given teacher with a particular type of child, which would lead to the unconscious preferment of such children. It may be that the teacher in the traditional school admires the brighter child; while the progressive teacher feels compassion for the duller child. Such tendencies would reinforce the achievement differences noted by this study in the two schools.
Discrepancy scores

There is a further derivative from the regression coefficient, so far not discussed, namely the discrepancy score. The discrepancy score is calculated by comparing the predicted score of an individual with his actual score on a measure. Where the former is larger than the latter, the difference is expressed as a negative, denoting under-achievement on prediction. If the reverse is the case, the difference is expressed as a positive quantity, denoting over-achievement. Thus, \( Y - \hat{Y} = D \). Individuals may be compared on the basis of their discrepancy scores, or a mean discrepancy score can be produced for a group.

Nevertheless it is not possible to present here mean discrepancy scores for the four school groups, since by construction the total discrepancy scores of the group on which a regression coefficient is calculated summate to zero. These scores can only be used in a procedure which samples the group. They have been so used in connection with the analysis of the Ideal Person and 'Wicked Deed' projective material (Sections 4:3 and 4:4)*. To produce mean discrepancy scores for the four school-sex groups would have involved pooling all scores of the four groups and calculating one regression coefficient for the total population. By such a procedure the four school groups then become samples of this larger group and mean discrepancy scores could be calculated. However, the amount of work involved in the calculation of regression coefficients is very considerable and time could not be spared for this further treatment of the data. While, therefore, a precise statement of the relative positions of the four groups on each measure in these terms is lacking, a fair estimate of the probable results can be drawn from Figures 1 to 5 respectively.

Final comments on models of progress

Levels of attainment depend partly on potential, partly on opportunity to develop potential. The comparative use of attainment scores without reference to potential and opportunity is therefore suspect, as are progress scores based on differences between attainment scores on test and re-test. Children of higher potential, with higher attainment scores, in the absolute sense, than other children of lower potential, with higher attainment scores, in the absolute sense, than other children of lower potential, may nevertheless by under-achieving and the latter over-achieving. To quote an actual example, one boy

* Some further individual discrepancy scores are reported in Appendix A.
(I.Q. 109) had a Vernon arithmetic score of 16, while another boy (I.Q. 75) had a Vernon score of 13. When predicted scores and discrepancies were calculated the first boy obtained a discrepancy score of -5 (denoting under-achievement) and the second boy a discrepancy score of +1 (denoting over-achievement).

While in the present section the alternative model of progress has yielded no complete reversals of the order of school-sex groups shown on the standard model of progress, it has produced reversals of expectations at certain points of the intelligence range. An instance of complete reversal of the rank order produced by the standard model of progress when the alternative model is adopted, is contained in Section 4:3 (pp 58/75), where one sub-group when compared with three other sub-groups, makes most progress in terms of difference between scores on test and re-test and least progress in terms of mean discrepancy score.
When the I.Q. 's (obtained at 11 years) for the population were inspected, group means for the four school sex groups were found to differ by a maximum of ten I.Q. points. Ranking the groups from highest to lowest mean intelligence produced the following order:- Townsend girls, Townsend boys, Parkside girls, Parkside boys. The differences, as tested by one-way analysis of variance, were not significant.

The group means on three standardised tests, namely the WISC Vocabulary sub-test, the Vernon Graded Arithmetic/Maths test and the N.F.E.R. Secondary Reading Test 2, were also analysed. In all three cases the rank order of groups on attainment was found to be: Townsend boys, Townsend girls, Parkside girls, Parkside boys. All differences were statistically significant. It was suggested that these differences were produced by varying degrees of realisation of true potential in the four groups.

Scores on the WISC sub-test and the Vernon arithmetic test were also available for these children (now 15 yrs) at 11 years of age. When mean group differences in score between test and re-test were inspected, it was established that the four groups had progressed at significantly varying rates in respect of the arithmetic measure. The mean group differences between test and re-test for the WISC sub-test were not significant. However, it was found that scores on the WISC test were lower for each group at 15 years than at 11 years. This drop in score was significant for all groups. Possible reasons for this negative change are discussed.

Vernon arithmetic scores were available for these children at two earlier ages, namely at 9 and 10 years. When only those children who took this test on all four occasions were considered, it was found that Townsend boys made more progress and obtained higher attainment scores than any other group and that Parkside girls, after a slower start, showed better progress and attainment than either Townsend girls or Parkside boys. Parkside boys had the poorest showing on both counts, except that their progress rate (but not their attainment) rose above that of Parkside and Townsend girls towards the end of the period examined. The hypothesis that a traditional approach to education favours the development of mathematical ability in boys, while a progressive approach favours its development in girls, is discussed.
A further finding was that all four school-sex groups made more progress between the ages of 9-10 than between 10-11, the year of the 11+ examination. A tentative explanation of this finding in terms of increased anxiety during the 11+ period is offered.

In this longitudinal study the standard model of progress (namely the difference between scores on test and re-test) was found to be inadequate. In general, tests either do not have a sufficiently high ceiling or sufficiently low base-line to deal with a population having both a wide age-range and a wide I.Q. range. Further, account must be taken of initial potential when differences in attainment are to be compared. An alternative model of progress involving a regression formula was applied, in which attainment was predicted on the basis of measured intelligence. By construction, the size of the difference (positive or negative) between actual and predicted performance, is statistically unrelated to level of intelligence. Nevertheless, the basis of comparison is between children of like intelligence.

On this alternative model of progress Townsend boys were again in general the group with the most adequate performance. However, the very dull Parkside boys perform better in arithmetic and also marginally in reading than the very dull Townsend boys. All except the brightest Townsend girls are achieving below the level of both Parkside girls and Parkside boys on arithmetic. On the WISC vocabulary and the reading test Townsend girls in general perform considerably better than both Parkside groups. Parkside girls make a better showing against Parkside boys in arithmetic than is expected in terms of the known sex differences at this age. Parkside boys are clearly ahead of Parkside girls on the WISC vocabulary score. In respect of the reading score, the brighter Parkside girls do better than the brighter Parkside boys, but the duller boys outshine the duller girls.

Attempting cautious generalisations, it appears that the traditional approach to education favours the brighter child, while the progressive regime benefits the duller child. In addition, boys in general benefit more from a traditional framework, while girls in general benefit from the progressive environment.

A further result of applying the alternative model of progress was the realisation that different models of progress tend to produce rather different results, which may in turn engender differing 'explanations'.

The general conclusion of this section was that the attainment
and progress of a given child is the result of a complex interaction of potential, the particular school subject, teaching methods, sex and socio-economic background; and that, convenient though it would be if there were, there are in fact no simple answers to educational problems.

References (Section 3)


SECTION 4

THE PROJECTIVE MATERIAL
Section 4:1  Rationale of the approach to the projective material

Before going on to consider the actual results of the four projective tasks, namely the Best Moment, Ideal Person, Wicked Deeds and Retrospective Essay scripts, it would seem desirable to consider why, for instance, the Best Moment categories of Table 12 differ in some respects from a previous analysis of the replies of these same children to a similar test four years earlier, especially in so far as the present study specifically constitutes a follow-up of that earlier study. (Pringle, 1963)

One answer to this question is that when dealing with projective material of this kind, the categories into which the responses are sorted must obviously to some extent be determined by the material itself. In fact it is possible to give this tendency its head so that in one sense the data is almost self-sorting. This 'permissive' attitude in any case appears preferable to forcing the material into preconceived categories. If the premise is accepted it follows that the categories into which material is sorted tend to differ from occasion to occasion, since the responses obtained from occasion to occasion and from one population to another tend to differ rather widely (as our experience has demonstrated).

It would further appear that one cannot really know in advance which category or way of looking at projective material is going to prove useful or meaningful in a longitudinal sense; which, in other words, is going to survive the journey to another population or another time. When a category fails to survive the transition, one has, of course, lost the possibility of a direct comparison between the populations concerned. It implies that one has failed to find in the haystack of local conditions and characteristics the needle or, to mix metaphors, the thread of development which one assumes (as an act of faith or intuition) must be common to all populations of children everywhere.

The problem of analysing projective data is a difficult one for the following reasons. One can allow the data, as suggested, to speak for itself; that is, one accepts the revealed characteristics of a set of responses as one's baseline instead of bringing preconceived ideas to the situation. Yet one knows at the same time from experience that many of the characteristics displayed by a given population are likely to be purely local, i.e. typical of that sample but not necessarily of any other. The art is to find the sufficiently generalised category which, while embracing local variations, enables one to proceed from population to population demonstrating the same basic pattern in each.
It seems essential in this connection that all studies of projective material should be longitudinal in nature. A succession of horizontal studies of different populations at various ages is no substitute. Unfortunately it is only too often assumed to be. Especially today, when environmental forces acting on children are in a state of such constant flux it must not be assumed that the environment of any one year-group (e.g. those born in, say, 1938) is the same as any other (as opposed to those born in 1940), let alone that of one generation compared with another. It seems, furthermore, intrinsically unlikely that the same event would have the same effect on two children of dissimilar ages - a rather more subtle environmental distinction.

In the present study we have been fortunate that some categories have meaningfully survived the four years during which the children grew from 11 to 15 years of age. Meaningfully is the operative word here. If the frequency of a category over a period of years fails to reveal any pattern, i.e. in the sense of correlating with other observed changes of one kind or another, but is, as far as one can see, completely random in its variation, the mere fact of its 'survival' is not particularly helpful. In the case of the category 'travel and entertainment' in Best Moments we were doubly fortunate in that it was responsible for the insight that what the bright child does at eleven the dull child tends to do at fifteen. This concept was applied to the other types of projective material of the present study and in turn led eventually to the realisation that certain changes in projective material seem to be related not so much to level of intelligence, but to progress in school subjects, i.e. to the realisation of intellectual potential. This notion is developed particularly in Sections 4:3 and 4:4.
SECTION 4-2

'Best Moment of my Life'

Review of an earlier study

In a study of school-leavers West (1958) asked 900 children to write for ten minutes about the best moment of their lives. Replies were obtained from grammar, technical and secondary modern school children. In the first instance these were sorted into two broad categories: those containing an achievement motive and those containing no achievement motive. A much higher incidence of achievement was shown by the grammar and technical school populations than by the secondary modern children, and boys showed the motive rather more than girls. Further breakdowns are given for achievement in examinations, in sport and "other" achievement. The remaining scripts, i.e. those showing no achievement motive were analysed into a number of categories including relief from anxiety, travel or holiday, flying, watching a display and birth of a baby. More girls than boys appeared in the category relief from anxiety. Holiday or travel was a category favoured more by secondary modern pupils than by those attending grammar or technical schools, and boys were found to choose it more often than girls.

Previous results obtained from the Parkside-Townsend population

Apart from the present occasion at 15 years, the follow-up population had reported on their "Happiest Day" on four earlier occasions: at the ages of 7½, 8½, 9½ and at 10½. These results have been analysed and discussed in a recent paper (Pringle 1963). In view of the youth of the children at that time subjects were not asked to write about their Happiest Day. Instead the information was obtained during an interview. Replies were analysed in terms of the following categories: travel and entertainment; Christmas and birthdays; family events; unusual experience; interests; achievements; relief from anxiety; others.

For the population as a whole the most frequent category proved to be travel and entertainment. Over the four-year period achievement increased in importance as a category. When boys and girls were considered separately, two categories topped both lists (travel and entertainment; and Christmas and birthdays). But twice as many girls as boys mentioned family events and the difference increased with increasing age. Boys
mentioned unusual experiences more frequently than girls. When the
two schools (Parksaid and Townsend) were considered separately little
difference could be demonstrated between them in frequency of categories.

When a bright group (mean Terman-Merrill I.Q. 142.3) and a dull
group (mean Terman-Merrill I.Q. 80.7) were compared (N=23 in both cases),
it was found that the brighter children mentioned travel and entertainment
more often than the dull group, while the latter tended to favour instead
festivities and presents. Achievement was mentioned more frequently
by the bright group particularly in the fourth year. Neither of these
sub-groups mentioned relief from anxiety. In fact relief from anxiety
was actually very infrequently mentioned by any of the groups through-
out the whole four-year period.

Method and results of the present study

The children (N=81) were asked on this occasion to write for
ten minutes on the subject: The Best Moment of My Life.

The results of the analysis of the responses received are
shown in Table 12 in order of preference by the total population.

A few children's Best Moments occur twice in the above table
since it was found impossible to make the categories entirely mutually
exclusive without forcing the results. One boy, for instance, wrote
of the gift of a bicycle as the result of an examination success. Another
of relief from anxiety while travelling. Such scripts therefore appear
in more than one category, but never in more than two. Additionally one
or two children gave more than one Best Moment (but again never more than
two, except for one girl whose script was therefore categorised under 'othe
mentions') and these children also figure twice since both Best
Moments were counted. The results were therefore expressed as a per-
centage of the number of responses not the number of children, the former
being somewhat higher.

Discussion of results

1. Travel and entertainment

This category is heavily favoured by Parkside and much less
Table 12

*Percentage frequencies of Best Moment categories at 15 years*

<table>
<thead>
<tr>
<th></th>
<th>Travel and entertainment</th>
<th>Achievement</th>
<th>Gift of a pet or birth of a sibling</th>
<th>Relief from anxiety</th>
<th>Gift of an object</th>
<th>Other mentions</th>
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<td>8</td>
<td>36</td>
<td>12</td>
<td>4</td>
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<td>25</td>
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<tr>
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<td>12</td>
<td>24</td>
<td>15</td>
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<td>22</td>
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<td>10</td>
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<td>14</td>
<td>18</td>
<td>8</td>
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<tr>
<td><strong>All Boys (N=34)</strong></td>
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<td>25</td>
<td>3</td>
<td>8</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>(N of responses=40)</td>
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<tr>
<td><strong>TOTAL (N=79)</strong></td>
<td>42</td>
<td>19</td>
<td>11</td>
<td>8</td>
<td>5</td>
<td>15</td>
</tr>
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<td>(Total N of responses=91)</td>
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</table>

*Percentages are based on N of responses, not N of children

**One blank script returned by each of these groups**
popular with Townsend. Also, in the aggregate, the boys favour the category more than girls. This latter finding agrees with the results of the earlier investigation of these children and also with those of West (1958) in respect of the category Travel or Holiday.

Before considering the possible significance of the Parkside emphasis on travel and entertainment one or two provisos operate. Firstly that West's Travel or Holiday category is clearly not identical with the present study's Travel and Entertainment, although obviously there is considerable overlap. Secondly that the present population is not a random sample of Pringle's original population (Pressure of time in this instance prevented our re-calculating the results of the earlier study for the follow-up sample only, which is otherwise the standard practice of the follow-up) Hence it must be realised that conclusions arising out of comparisons between present and other findings can only be tentative, since, for instance, it is not possible to be certain that the responses of the follow-up sample on the earlier occasions duplicate those of the parent population on those occasions.

West's study showed the category Travel or Holiday to be significantly favoured at 15 years by the least intelligent, i.e. by the secondary modern sample as compared with the grammar and technical school samples. Pringle found that between the ages of 7½ - 10½ in a comparable population (in the sense that it represented a cross-section from the full intelligence range) the brighter children favoured the category Travel and Entertainment while the duller did not. In the present study, which involves some (namely the dull) of the children of the earlier Pringle study, Parkside children were found to favour the category over Townsend children. In so far as the Parkside population as a whole is less intelligent than the Townsend population, it can be claimed in this sense that the least intelligent favour the category Travel and Entertainment. This agrees with West's findings. (However, again, West was examining the full intelligence range, whereas our sample is drawn from the lower end of the intelligence register.)

As a refinement of this somewhat global view of the situation it was decided to compare the intelligence levels within the present population of those whose Best Moments fell into the Travel and Entertainment category and those whose did not. The prediction was made that children mentioning travel and entertainment would have a lower average I.Q. than these children who figured in other categories. The results of this analysis are shown in Table 13.

In respect of the total population the prediction is borne out. It is also borne out in terms of the school-sex groups, except for
Table 13

Mean I.Q.'s of children mentioning travel and entertainment at 15 years compared with other mentions

<table>
<thead>
<tr>
<th></th>
<th>Travel and Entertainment</th>
<th>All other mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I.Q.</td>
<td>N</td>
</tr>
<tr>
<td>T Girls</td>
<td>99.2</td>
<td>(5)</td>
</tr>
<tr>
<td>T Boys</td>
<td>107.5</td>
<td>(4)</td>
</tr>
<tr>
<td>P Girls</td>
<td>94.9</td>
<td>(15)</td>
</tr>
<tr>
<td>P Boys</td>
<td>92.0</td>
<td>(14)</td>
</tr>
<tr>
<td>Total</td>
<td>95.7</td>
<td>(38)</td>
</tr>
</tbody>
</table>
Townsend boys, but here the number of cases is small.

The argument which has been built on this admittedly slender evidence (taken together, however, with the more substantial evidence of the same kind in respect of our other projective material, Sections 4:3 and 4:4) is as follows.

(1) That all perception is structured to some extent
(2) That perception of the past is therefore also structured.
(3) That of the factors structuring perception a major one is the psychic needs of the individual at the time.
(4) That at a certain stage of individual development experiences of travel will tend to be seen as constituting the best moments of one's life. Further that this stage is reached earlier by more intelligent and later by duller children.

Undoubtedly such variables as the amount of opportunity to travel (hence of socio-economic status) and the age at which travel is first experienced are likely to affect the results. But it is suggested that over and above these there is both a time at which the growing organism is particularly susceptible to the impressions of novel stimuli and a time (possibly a different time) at which such events, present or past, are perceived as constituting the "best" (happiest? most exhilarating? curiosity satisfying?) moments of one's life. Best Moments are perhaps more prone to be affected by purely fortuitous events outside the control of the individual than are, say, Ideal Person choice or judgement of wickedness. One boy gave as his choice the moment when he heard that his arm was after all not going to be amputated. Another gave the time his father had a win on the football pools. Clearly these are events which are unlikely to happen to the majority of people and are thus not available when making a choice. One of the essentials of the open-ended projective test would appear to be that the population studied should have a wide range of roughly similar experiences, so that as far as possible the structuring of the response comes from within the individual and not from external factors beyond his control. It also seems unlikely that the Best Moment of one's life is going to play the day to day role in the thoughts of the individual which, say, Ideal Person or Wicked Deeds are likely to do. Many children prefaced their scripts by saying that they found it difficult to choose any one Best Moment. This difficulty was not voiced in the other projective measures.

2. Achievement

The earlier study of the present population had noted that the
achievement motive while almost non-existent at 7 1/2 years (one child only) increased in frequency over the four years up to age 10 1/2. It was more favoured by bright than by dull children and approximately equally by boys and girls (3% and 4% respectively). West found the achievement motive more frequently shown by the brighter children, and more frequently by boys than girls except in the case of the grammar school sample where the position was reversed (52% girls, 44% boys). In the present study boys favour the achievement motive more than girls both in Parkside and Townsend. Parkside as a whole favour it more than Townsend which is unexpected since West's results suggested a link between intelligence and achievement; as Parkside has a rather less intelligent population, the opposite would have seemed more likely.

3. Gift of a pet or birth of a sibling

The reason for bracketing (the gift of a pet with the birth of a sibling is not because the latter is identical with the former, but rather because the former appears to be equated with the latter, to judge by the evidence offered by the scripts. Some quotations follow. The children are writing about their pets.

(1) "She was the tiniest ball of fluff and I carried her home wrapped in a blanket... Now I don't know what we'd do without her."

(2) "I still have her now and I don't know what I should do without her... she is like a sister to me".

(3) "I called him major and he became one of the family."

It appeared from these and similar accounts that pets might be psychologically equivalent to siblings. Accordingly records were examined to see how many, if any, of the children who chose the gift of a pet were only children. It turned out that 50% of them were only children, whereas the frequency of only children in the total population is only 14%. It seems therefore that there are some grounds for assuming psychological equivalence between pets and siblings. Moreover, the findings appear to support the adage that only children are lonely children.

Partly out of general interest, partly to provide some proof of internal consistency of the projective material and support for which may appear to be rather tenuous theorising, the Wicked Deeds scripts were examined to see whether the children in the category gift of a pet gave greater prominence to cruelty to animals as a Wicked Deed* than the rest of the population. In fact they did. The evidence follows.

* The 'Wicked Deed' test was administered earlier in the testing programme.
Considering the six most Wicked Deeds, which the children were asked to rank in order of wickedness from one to six, the "pet" group (N=10) (a) had an average of 2.0 mentions of cruelty to animals compared with an average of 1.6 for the remainder of the population (b) gave cruelty to animals an average rank order of 2.5 against the remainder of the population's 2.9 average rank order - indicating that the former group considered it a more important offence and (c) all without exception gave cruelty to animals as a Wicked Deed i.e. 100% of them, whereas of the remainder of the population only 56% gave it as a Wicked Deed.

In conclusion, the fact that Townsend girls are involved to such an extent in this category, almost in isolation (9 of the 10 children in this category were girls) is almost certainly due to the chance fact that six out of the eleven only children in the population are in this group.

Nevertheless, the complete non-involvement of Parkside in this category possibly requires some additional explanation.

4. Relief from anxiety

This category had hardly figured in the junior school study. West reported the frequency of relief from anxiety to be higher for girls (20%) than for boys (11%). There was a slight tendency for this category to be favoured by the secondary modern population over the grammar and technical school children. The present study does not confirm West's finding that the frequency of this category is higher for girls. Neither, however, is the opposite demonstrated. Instead there appears to be a school-linked bias in the case of Townsend. This, again, is counter to the tendency in West's study, where the least intelligent children favoured this category.

5. Gift of an object

This category was used neither by West nor in the earlier study. It was felt that children mentioning the category might differ in a demonstrable way from those who chose the gift of a pet (i.e. an animate as opposed to an inanimate object). It was thought that such children might tend to come from large families where their relationship needs were adequately satisfied but where objects and personal possessions might be in short supply. Of the four children concerned (discounting the child
who gave the gift of a bicycle as the result of an examination success) one came from a family of six. However the category was too undersubscribed to be of any real value.

6. Other mentions

These included: a birthday party; being excommunicated from the Plymouth Brethren; father winning the pools; meeting a famous person; being a bridesmaid; an evening at home with the family; seeing the film of a birth of a baby; girl giving three Best Moments; celebration of parents' 25th wedding anniversary; going to meet brother at the port, not finding him and then spending night in a snow-bound station; going out with a boy for the first time; confirmation.
"My Ideal Person" *

1. Introduction

The child's description of his Ideal Person has been the subject of a number of studies. An early instance is that of Macauley and Watkins (1926) who, as part of a study of children's moral development, asked their 2,420 subjects of varying ages, educational and socio-economic backgrounds to write for ten minutes under the heading: "What person of whom you have ever heard or read would you most wish to resemble? Give reasons". Results are presented in the form of percentage of choices under a number of headings - acquaintances, deity, soldiers, etc.

Analysing these the authors conclude that choice of Ideal Person varies typically with age and is further affected by environmental factors. Facing the question whether in fact an early type choice in an older child indicated an undeveloped mind they suggest that it may well do but the reasons for the choice must be considered rather than the choice as such. The most important single reason given up to the age of thirteen to fourteen years is power and wealth (50%).

In the first of a series of studies Havighurst and his co-workers (1946), reviewing a number of earlier studies, suggest that the wording of the instructions given to the child is a variable affecting the results obtained, but that nevertheless broad inter-study comparisons are possible. In their own study a large, representative cross-section of American school-children (N=1147) were asked to write an essay on: 'The person I would like to be when I grow up'. They were allowed fifteen minutes for the task. The general conclusions, confirmed in later studies of New Zealand and South American children (Havighurst and MacDonald, 1965; Havighurst et al. 1965), are firstly that children of different ages typically choose different ideal figures. The age sequence, it is suggested, is not rigid and some steps may be omitted by some children. Three main stages are postulated (together with an additional five residual categories involving in fact relatively few children.

* This sub-section was prepared for separate publication as a paper and is presented here substantially in that form. Therefore Tables are not presented for the incidence of F and M choices in terms of school sex-groups. However, the trend (at 15 years) is a higher percentage of M-choices by girls than boys, and a higher proportion of M-choices at Townsend than at Parkside. As a final stage the young adult tends to choose on the basis of 'nobility of character'.
children). From approximately six to eight years a parent or parent- surrogate is chosen, from eight to sixteen years a 'glamorous person' and/or an 'attractive visible adult' from the environment and from sixteen years on a composite, imaginary person. It is not clear whether the two parts of the second stage are alternatives or in sequence, nor is it established whether stage three is necessarily reached by all individuals. To settle these questions a longitudinal study is required. The authors conclude that lower class children retain glamorous person choice longer than higher class children and that boys retain them longer than girls. If the developmental sequence is accepted as a sequence of maturity, general statements about maturity on the basis of Ideal Person choice may be made.

Edwards (1959) studied two groups of secondary modern children aged 11. (N=100) and 14/15 (N=129). The form of instructions was that used in the earlier Macauley and Watkins study. Results are reported in the form of source of choice, i.e. books, television, etc., and reason for choice. Edwards finds that the most frequent reason for choice is 'good in the sense of efficient', which is given by 43% of the 11+ group and 34% of the 14/15 year olds. The next largest single category is money, given by 15% of the older groups. He concludes, therefore, that no 'broad' development can be traced on boys' attitudes towards Ideal Persons.

Another large-scale study was conducted by Bray (1962). The subjects constituted a random sample (N=2768) of a total population of 5359 candidates for the 11+ examination. The children were instructed to write part of the most interesting chapter of a book about a person, living or dead, whom they admired, and were given 35 minutes for the task. Results are reported in the form of same sex/other sex, remote/local choices and in terms of source of Ideal Person (books, films, etc.) and his or her occupation, i.e. explorer, sportsman, film-star, etc. No general hypotheses are advanced in conclusion.

Jackson (1964) asked the fourth year of a streamed junior school (N=91): 'If you weren't yourself, which famous person would you like to be?' Each child was allowed two choices (three in the C stream by an oversight). Reasons for choice were not asked for. Results are presented separately for the A, B and C streams under the headings School, Pop-Singers, Films and T.V., Sport, Figures of State and Others. 'School' figures are defined as those whom the child is most likely to have learned about through school, e.g. historical figures, literary figures, great men. Among other points a decrease in the choice of 'School' figures and an increase in the incidence of pop singers is shown from the A through the B to the C. stream.
A recent study by Pringle and Edwards (1964), using 226 children in their final year at two junior schools, again utilized the form of instructions employed by Macaulay and Watkins. Results are reported in terms of remote/local, same sex/other sex choices, source of choice and reason for choice. The most frequent reason for choice was found to be good in the sense of efficient (34%). The results were further examined in terms of differences between three ability groups described as able, average and low-average/dull on the basis of I.Q.s obtained with the Terman Merrill Scale. Statistically significant differences were demonstrated among the ability groups.

Most workers appear to agree that trivial and relatively transient factors, such as the birthday of a national figure, can influence results.

II. Subjects and Methods

A group of 81 children aged 14/15 years at four secondary modern schools in the Midlands were asked: 'What person whom you have ever known or of whom you have ever heard or read would you most wish to resemble? Give a list of reasons.' Ten minutes were allowed for the task. The form of instructions is taken from Macaulay and Watkins (1926).

III. Results

The results of the present investigation will be reported elsewhere (Pringle and Gooch, 1965a) in the form adopted in the original Pringle and Edwards (1964) study cited above. They are, therefore, not included in this form in the present paper. Instead a method of evaluation, not merely suggested, but in fact only made possible by the (now) longitudinal nature of the data, has been employed.

The scripts from both testing occasions were assigned to one of two categories termed Fashionable/Famous (F) and Moral (M) respectively. The unanimous agreement of three judges was required before final assignment to a category. When agreement could not be reached for any reason, the script concerned was assigned to a category termed Unclassifiable (U).
Where the Ideal Person was admired for qualities of a superficial or worldly kind, or where the view was glamourised in some way, the response was classed as an F-choice. Such choices show what would usually be termed a shallow evaluation of happiness and of the character, conduct and purpose of life. Two examples of F-choice by girls and two by boys follow. (In all cases the children's original spelling is preserved).

(Girl, 15) "I would like to be like model Pattie Boyd because she is pretty she has got a nice figure she has filmed with the Beatles and she is a model who earns a lot of money. She is on magazine covers."

(Girl, 15) "My favourite person whom I would like to be is Cilla Black. Very often she tours with the Beatles ...... She also wears mod clothes and she can also buy as many pairs of shoes that she wishes."

(Boy, 15) "I would like to be like Columbus or Drake to find an island which no one knows about and then I'll be famous in finding a place then I'd put a British flag on."

(Boy, 15) "Cliff Richard. Because he does a lot of travelling abroad....... He is also quite good-looking as well. I would like to be Cliff because I would always have something to do buying lots of clothes, travelling abroad and holding parties."

Where the Ideal Person was admired for moral qualities (kindness, fairness, understanding, etc.) to the exclusion of such attributes as physical appearance, wealth, position, the response was classed as an M-choice. One example of M-choice by a girl and one by a boy follow.

(Girl, 15) "My mother...... she is very kind and forgiving and always tries to give me the best I can have. She is never nasty to anyone without good reason. She works very hard to keep us in clean clothes and keep our house tidy."

(Boy,15) "My father. He isn't soft with his children like some fathers and there again he isn't too strict. When he is engaged in conversation he doesn't interrup them he listen to their side of the talk and when he is speaking he tries to see their point of view..."
as well as his own."

Where a choice contains both M and F elements, or where the orientation appeared to be along a different axis, the response was coded Unclassifiable. An example of U-choice in this second sense follows:

(Boy, 15) "Alfred Hitchcock...... He has a very interesting personality. I believe I would wish to be him because of his outstanding imagination. When watching one of his films you notice the striking reality. He never makes a film that is to far out of understanding."

Further examples of U-choice are given in section 4.

By reason of their sketchy nature the scripts of eleven-year olds were in general more difficult to classify. Examples are given in Pringle and Edwards (1964) and also below in section 4.

The results of the categorisation are shown in Table 14. A chi-square test on the various differences failed to yield significance. But it appears that, age for age, girls make more M choices than boys and that frequency of M choices rises with age for both boys and girls.

<p>| Table 14 |
| &quot;Fashionable&quot; and &quot;Moral&quot; choices made at 11 and 15 years of age |
| |
| F | M | U |</p>
<table>
<thead>
<tr>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up sample</td>
<td><strong>Boys (N=33)</strong></td>
<td>19</td>
<td>58</td>
<td>10</td>
</tr>
<tr>
<td>at 15 years(1964)</td>
<td>*<strong>Girls(N=45)</strong></td>
<td>21</td>
<td>47</td>
<td>20</td>
</tr>
<tr>
<td>Total(N=78)</td>
<td>40</td>
<td>51</td>
<td>30</td>
<td>38</td>
</tr>
<tr>
<td>Follow-up sample</td>
<td>*Boys (N=32)</td>
<td>26</td>
<td>81</td>
<td>5</td>
</tr>
<tr>
<td>at 11 years(1960)</td>
<td>Girls(N=46)</td>
<td>29</td>
<td>63</td>
<td>14</td>
</tr>
<tr>
<td>Total(N=78)</td>
<td>55</td>
<td>71</td>
<td>19</td>
<td>24</td>
</tr>
</tbody>
</table>

* 3 boys did not take the test in 1960
** 2 blank papers returned by boys
*** 1 blank paper returned by a girl
The F and M groups were then compared on a number of tests administered in both 1960 (at 11 years) and 1964 (at 15 years). However, the Cornwell I.Q. is that established in 1960, since no general test of intelligence was administered in 1964; while in 1960 the N.F.E.R. results (Table 15) show that in 1960 the F group was superior in all cases whereas the position was reversed in 1964, the M group being superior in every case. Uncorrelated t-tests were used to test significance and, with one exception, all differences were found to be significant. Results for the "Unclassified" group and for the children returning blank scripts are not shown. However, the U group tended to score at or above the level of the F group in 1960 and the M group in 1964 (average I.Q. of the U group = 101.8), while the mean I.Q. of the three refusers was 81.0 and test scores were correspondingly low. The N.F.E.R. Secondary Reading Test was not administered in 1960, other appropriate measures of reading ability being used on that occasion.

Table 15

<table>
<thead>
<tr>
<th></th>
<th>Follow-up sample at 11 years (1960)</th>
<th>Follow-up sample at 15 years (1964)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(N=55) M(N=19)</td>
<td>F(N=40) M(N=30)</td>
</tr>
<tr>
<td>Cor. well I.Q. 1960</td>
<td>98.0 92.6</td>
<td>93.7 100.2</td>
</tr>
<tr>
<td>s.d.</td>
<td>10.5 14.2</td>
<td>9.7 14.4</td>
</tr>
<tr>
<td>WISC Vocab.</td>
<td><strong>10.4</strong> <strong>8.8</strong></td>
<td><em><strong>7.1</strong></em> <em><strong>9.5</strong></em></td>
</tr>
<tr>
<td>s.d.</td>
<td>2.1 2.3</td>
<td>1.6 2.3</td>
</tr>
<tr>
<td>Vernon Arith/Maths</td>
<td><strong>30.0</strong> <strong>24.4</strong></td>
<td><strong>33.7</strong> <strong>40.3</strong></td>
</tr>
<tr>
<td>s.d.</td>
<td>7.1 9.4</td>
<td>9.4 10.2</td>
</tr>
<tr>
<td>NFER Sec. Reading 2</td>
<td>- -</td>
<td><strong>17.0</strong> <strong>21.4</strong></td>
</tr>
<tr>
<td>s.d.</td>
<td>- -</td>
<td>5.1 5.7</td>
</tr>
</tbody>
</table>

*p < .05
**p < .01
***p < .001
In Table 16 the progress of the 1964 F and M groups between 1960 and 1964 is considered. This is shown in two ways. Firstly by subtracting test and re-test scores where two testing occasions exist. A constant of ten was added to eliminate negatives. Secondly by calculating mean discrepancy scores and predicted scores based on I.Q. using a regression formula. Differences between F and M groups on the various measures were examined for significance by uncorrelated t-test. Significant differences are indicated.

### Table 16

**Mean progress made between 11 and 15 years of age by the "Fashionable" and "Moral" Groups of 1964**

<table>
<thead>
<tr>
<th></th>
<th>F Group (1964)</th>
<th>M Group (1964)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N=40)</td>
<td>(N=30)</td>
</tr>
<tr>
<td>Progress (Test/Re-test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1960/64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*WISC (Vocab)</td>
<td>+7.8 (1.7)</td>
<td>+8.3 (2.0)</td>
</tr>
<tr>
<td>*Vernon</td>
<td>+17.8 (4.2)</td>
<td>+19.0 (5.6)</td>
</tr>
<tr>
<td>Arith/Maths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Progress (Discrepancy</td>
<td>WISC (Vocab)</td>
<td></td>
</tr>
<tr>
<td>Scores 1964</td>
<td>** -0.6 (1.4)</td>
<td>** +0.8 (1.4)</td>
</tr>
<tr>
<td>Vernon</td>
<td>*** -0.9 (6.6)</td>
<td>*** +0.9 (6.9)</td>
</tr>
<tr>
<td>Arith/Maths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NFER Sec.</td>
<td>*** -0.7 (4.5)</td>
<td>*** +1.1 (3.7)</td>
</tr>
<tr>
<td>Reading 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* +10 added to all scores to eliminate negatives
** p < .001
*** approach significance (t=1.7 Table value of t < 2.0)

Lastly, it was decided to explore whether there were any differences in attainment over the four year period between children who gave the same reply on each occasion — whether it was a 'moral' or a 'fashionable' choice — and those who made a different choice at the later date. Therefore the children were divided into four sub-groups on the basis of their replies in 1960 and 1964 respectively. A child making an F choice on both occasions was assigned to sub-group F-F; if an M choice was made at 11 years and an F one at 15 years, it was
designated M1-F while the reverse order was labelled F-M2; the child
who made an M choice on both occasions was placed in the group M2-M2.
The reasons for differentiating moral choices into two types, M1 and
M2 will be discussed in the next section.

These four sub-groups (i.e., M1-F, F-F, F-M2, M2-M2) were
inspected for differences in attainment and progress, and the results
tested for significance by one-way analysis of variance. The averages
have also been rank-ordered, i.e., horizontally by rows, and their rank
orders are shown with the other results in Table 17.

Considering only the two progress sections, test/re-test and
discrepancies, and taking the average rank order for the four sub-
groups in each section, it will be seen that the M2-M2 group shares
first equal place with the F-M2 group (with an average rank order of
2) in respect of rest/re-test and takes sole first place in respect of
discrepancies with an average rank order of 1.3. It is noteworthy
that this is the case despite the M2-M2 low average I.Q. of 92.6.

IV. Discussion of Results

a) A developmental sequence in 'Ideal Person' choices

It appears from our results that with increasing age the
incidence of M choices increases while F choices decrease. The evi-
dence also indicates that among 11 year olds a high level of intelli-
gence and attainment is associated (to a statistically significant
extent) with F choices; by the time the children are 15 years old
this association is now found to hold for M choices to an even more
marked degree. Furthermore, the 15 year old M group has made more
progress in attainment than the 15 year old F group. In fact those
giving M choices are over-achieving in terms of their predicted
scores based on intelligence, while F subjects are under-achieving.
The most obvious explanation of these findings would be that F and M
choices of Ideal Person represent (in that order) a sequence of
development or maturation which is in turn related to measured I.Q. as
well as to level of scholastic attainment.

An embarrassment to this view lies in the fact that M choices
at 11 years seem to be associated with low levels of intelligence and
attainment (Table 15). In terms of the hypothesis outlined in the
preceding paragraph one would expect such children to be early developers
Table 17

Mean Performance and Progress of Four Sub-Groups between 11 and 15 years of age

<table>
<thead>
<tr>
<th>Mean Cornwell I.Q.</th>
<th>M1-F (N=11)</th>
<th>F-F (N=27)</th>
<th>F-M2 (N=20)</th>
<th>M2-M2 (N=7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>92.2</td>
<td>94.4</td>
<td>102.3</td>
<td>92.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attainment:</th>
<th>Mean Rank Order</th>
<th>Mean Rank Order</th>
<th>Mean Rank Order</th>
<th>Mean Rank Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISC Vocab.</td>
<td>6.3 (4)</td>
<td>7.4 (3)</td>
<td>10.0 (1)</td>
<td>8.6 (2) *p &lt; .001</td>
</tr>
<tr>
<td>Vernon A/M</td>
<td>31.6 (4)</td>
<td>34.7 (2)</td>
<td>41.9 (1)</td>
<td>34.0 (3) *p &lt; .01</td>
</tr>
<tr>
<td>NFER Sec. Reading 2</td>
<td>15.5 (4)</td>
<td>17.4 (3)</td>
<td>22.4 (1)</td>
<td>19 (2) *p &lt; .01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Progress between 11 &amp; 15 years</th>
<th>WISC Vocab.</th>
<th>Vernon A/M</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WISC Vocab.</strong> (Test/Re-test)</td>
<td>+7.6 (4)</td>
<td>+19.9 (1)</td>
</tr>
<tr>
<td><strong>Vernon A/M</strong> (Test/Re-test)</td>
<td>+7.9 (3)</td>
<td>+16.9 (4)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Progress between 11 &amp; 15 years (Discrepancy scores)</th>
<th>WISC Vocab.</th>
<th>Vernon A/M</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISC Vocab.</td>
<td>-0.9 (4)</td>
<td>-2.5 (4)</td>
</tr>
<tr>
<td>Vernon A/M</td>
<td>-0.4 (3)</td>
<td>+1.2 (1)</td>
</tr>
<tr>
<td>NFER Sec. Reading 2</td>
<td>-1.4 (3)</td>
<td>+1.4 (1)</td>
</tr>
</tbody>
</table>

* Statistical significance (by rows)
** +10 added to all scores to eliminate negatives
showing high levels of attainment. This, however, was found to be true only of a few of the 11 year olds who made an M choice.

This apparent inconsistency led to a re-examination of the scripts of the 11 year olds and the results suggest that the theory advanced above may yet be saved. Firstly, it seems that many of the replies awarded an M in 1960 were rather stereotyped, 'paying a mere lip service' to moral ideas and ideals, as the following two examples show:

(Girl, 11) "St. Paul. He was kind and good".

(Girl, 11) "Jesus. Because he made us and the beautiful world".

Macauley and Watkins (1926) distinguish between lip service and statements which 'reflect tested personal and moral experience'. The true M choice is of the latter kind, as shown in this extract from a very moving script:

(Boy, 15) "My uncle...he was always ready to help other people. The time when he died I never forgot what he said to me just before. 'I tried to show you the right way to lead a life now its time you try things your own way'".

The examples given in section III are also on this higher plane. Finally an example of a 'true' M choice as given by an eleven year old:

(Boy, 11) "Robert Oakes*- He is my best friend. I can trust him. He is nice. He is kind."

It is suggested that the early M-choice (i.e. that made at 11 years of age) which precedes a subsequent F-choice, differs definably from the M-choice which follows an early F-choice. There is, in other words, a developmental sequence (early) M-F-(late)M, or more briefly, M1-F-M2. (However, this hypothesis does not necessarily imply that all children pass through all three stages).

The definition of what exactly constitutes an M1-choice (as opposed to an M2-choice) is primarily a question-begging one. Wherever a child made an M-choice at eleven and an F-choice at fifteen it was assumed that such an M-choice constituted an M1-choice. There are,

* In this and subsequent cases where a pupil might be identified, fictitious names have been substituted.
however, other pointers. The M1-choice is often the lip service to moral ideals discussed above. One might ask what should some children (and not perhaps others) behave in this way. A possible explanation is that giving the 'right', i.e. adult approved, answer constitutes an attempt to win the favour of adults or somehow compensate for a consistently poor academic record. Alternatively, the M1-choice may indicate a late adherence to and belief in the over-simplified black-and-white morality of early childhood, as seen for instance in the fairy-tale.

Be this as it may, when sub-groups were formed on the basis of the suggested developmental sequence, the initial hypothesis was in fact generally well supported. Four sub-groups were established, namely (a) M1-F; (b) F-F; (c) F-M2; and (d) M2-M2; the first letter in each case represents the 11 year olds' choice in 1960, the second letter the 1964 choice of the 15 year olds.

b) 'Ideal Person' choices, attainment level and rate of progress

The M1-F group showed a remarkably consistent pattern of poor attainment and progress, which is entirely consonant with the picture of a developmentally very retarded group making a late entry into a relatively early conceptual stage. The F-F group were the next most unsuccessful, which again supports the idea of a relatively retarded group remaining stationary in an early stage of development. On the other hand, considering only progress made during the four year period the M2-M2 group has the best overall record, with the F-M2 group running a close second. Perhaps larger numbers in each sub-group would have brought out all these differences more strongly. At all events the general picture of the two M2 groups supports the hypothesis that these are two groups of relatively early developers. All the discrepancy scores of the two M2 groups are positive, denoting over-achievement, while all the discrepancy scores of the two F groups (M1-F and F-F) are negative, denoting under-achievement.

At this point, the question of attainment and progress must be considered more generally. The present study forms part of a much larger longitudinal study of a group of children followed through from the age of eight to the age of fifteen. One of the most crucial problems has been and still is the whole concept and the measurement of progress. The performance of the M1-F group on the Vernon Arithmetic/Maths test in Table 17 is an example. If difference in score between test and re-test is accepted as the measure of progress, the group in question makes more progress than any of the other three groups and receives rank order one. If, however, discrepancy score is taken as the measure (i.e. the
difference between actual and predicted score on the basis of I.Q.),
this same group is seen to be making less progress than any of the
other three, its rank order now being four.

Other considerations are, for instance, whether one is justified
in assuming equal intervals between scores at various points on the
total scale. Or, even if intervals were equal throughout, may one assume
that five points of progress for a bright boy indicates the same progress
for a dull one? Furthermore, there is a complete dearth of attainment
tests which can equally well be given to a population of eight and fifteen
year olds. One either finds that the tests have an insufficiently high
celling to distinguish adequately between the brighter-older children at
the one end, or an insufficiently low floor to do the same for the duller-
younger children at the other. Finally, it would appear essential that
the tests themselves be validated and standardised longitudinally, i.e.
by following through the same population, instead of taking horizontal
slices from a succession of populations and assuming them to be entirely
comparable. Therefore, when the present writers claim that one group
makes more progress than another it is with a full sense of the unsatis-
factory nature of the criterion which had to be used.

c) A suggested synthesis with previous work

This study supports the view held by a number of workers who
suggest that a pattern of development is discernible in the choice of
Ideal Person at various ages. Moreover it takes the matter one stage
further in finding support for this hypothesis in terms of I.Q. and more
particularly of scholastic attainment. The question nevertheless remains
of those workers who appear to find no such pattern.

Success or failure in this respect would appear to be largely
a matter of the appropriate choice for the categories into which the
Ideal Person responses are sorted; appropriate being taken to mean those
categories which reveal patterns of response or correlations with other
findings. Clearly there are likely to be aspects of the Ideal Person
which are trivial and incidental. If, for instance, the persons chosen
were grouped on the basis of whether they had blue or brown eyes (sup-
posing this information were available) it is unlikely that this would
reveal developmental patterns within the children giving the replies
or be productive of correlates in other directions.

It is possible to consider the information provided by Ideal
Person choice as being of three kinds:
(1) Information of an incidental, fortuitous, temporary or local character.

(2) Information relating to social and cultural patterns of a more permanent nature.

(3) Information relating to phylo-genetic stages of development.

The last two probably have something to contribute to an understanding of the personality of the child concerned.

At the outset, of course, one is not necessarily aware which type of information is being extracted. In analysing and systematising obtained responses it becomes evident whether or not useful and productive aspects are being selected.

The present writers suggest that the source of the Ideal Person seems mainly to yield information of type (1) described above. Furthermore, the occupation of the Ideal Person is not necessarily more useful. In short, failure to find patterns of development with this device is probably due to looking for them in the wrong place or way, rather than to such patterns not existing.

Considering those workers who have claimed to find (principally) age-limited patterns of choice in type of Ideal Person, the question arose whether their findings overlap in any way. The answer appears to be that despite superficial differences they do. In 1926 Macauley and Watkins found choices up to the age of about fourteen years to be motivated principally by 'a desire for power and wealth' (50.5%). Subsequently the main choice of the young adult is the 'noble' character who has performed distinguished social service. Havighurst in America in 1946 finds the main choice up to the age of sixteen years to be the 'Glamorous Person' (28%), though in the latter stages of this period the choice may be an 'Attractive Visible Adult' from the environment. The post-sixteen choice is typically the 'Composite Character', a figure built up of the admired qualities of several people.

Jackson found that the A stream chose more 'school' figures (31%) — some at least of which must have constituted M-choices — and fewer pop singers (26%), whereas the C stream chose more pop singers (45%) and fewer 'school' figures (5%). If the C stream is considered to have a lower maturational age than the A stream, this finding is also not dissimilar to the general pattern. In the present study the
writers found worldly and superficial qualities the reasons predominantly given for choice at eleven years (71%), this dropping at fifteen years to 49%. "Moral" reasons for choice increased from 24% to 37% in the same period.

Thus in broad outline, all the various findings are not dissimilar. The problem lies in finding two categories, general enough to encompass the variations of the different workers, in respect of two age groupings, namely, and approximately, pre-thirteen and post-thirteen years of age. As a basis for discussion the writers suggest that the first period seems to be characterised by a fantasy or wish-fulfillment choice while during the second period a reality choice tends to come to the forefront.

d) Developmental stages = an attempted synthesis

What precisely may be said to characterise a 'fantasy' choice? The Ideal Persons of this period are not real but idealised persons. They are not members of this world as it is in reality, in the sense that they do not have failings in addition to their virtues; they do not know sadness or weakness; they carry an aura of glamour, of adventure; their lives are without problems. (One would hypothesise that these figures possess attributes or freedoms which the child in question lacks or imagines he lacks.) If Freudian terminology may be used without commitment to be Freudian position, it would appear that the pleasure principle is heavily involved. Conversely, the period of the 'reality' choice is governed by the reality principle. To the extent that the figures chosen are larger than life they are idealistic. On the whole, however, the Ideal Persons chosen in this second period are very real people, in the sense that they are seen to have limitations, living and coping in an often un-ideal world. Frequently, the self is chosen. Again not some idealised self-image but an (apparently) realistic and critical appraisal. He are some examples of reality choices.

"My mother ....... she is never nasty to anyone without .... reason" (note: but she is capable of nastiness at times). "Myself ....... I would admittedly like to improve various faults of mine, but .... " "My parents ....... they are understanding, patient (something I shall never be)" "I don't think I would like to be anyone in particular just myself, ordinary, simple." "Myself ....... to be able to bear the sorrows of this world with a smile, which is often impossible."

The 'fantasy' choice, as defined, of the first period would appear to accommodate Macnuley and Wakins' 'power and wealth', Havighurst's
'Glamorous Person', Jackson's pop singers, the present study's 'Fashionable/Famous' and even at least part of Edward's 'Good in the sense of efficient'. (Edwards does not comment on this category's drop from 43% to 34% between eleven and fifteen years.)

The 'reality' choice, as here defined, can accommodate Macauley and Watkins' socially 'noble' choice; likewise both the 'Composite Character' and the 'Self' choice of Havighurst. (where Havighurst requires two categories for the Ideal Persons of the second period our proposal requires only one). The 'Moral' choice of this study and some at least of Jackson's 'school' figures also fit into this framework.

Using the definition of the 'reality' choice, instead of the original 'Moral' choice, several of the choices previously placed into the 'Unclassifiable' category can now be re-assigned. The two 'Unclassifiable' scripts quoted below illustrate this point. Now they fit quite readily into 'reality' choice, whereas they could not be placed into the 'Moral' category without straining the definition. The point is that not all reality choices are also moral, although many are.

(Boy, 15) "Lord Beaverbrook. From what I have heard of this person, character and life's work he appears to have established himself with an Empire purely by hard work and sensible business transactions."

'Boy, 15) "...... an astronomer like Patrick Moore because I am very interested in astronomy and he has such a lot of facilities open to him ...... Especially during this day and age when there are many astronomical events taking place and plenty of things to find out".

The suggestion that the early of pre-thirteen period is characterized by a 'fantasy' choice, while the subsequent period is characterized by a reality choice, in no way implies a definitive or inflexible demarcation. It is a matter of emphasis rather than a rigid exclusion of the attributes of one period from the next. In particular it is highly likely that there would be transitional periods where elements of both types of choice are found side by side. There is some evidence to support this view in the scripts of the present study and more might have emerged had the test been given also when the children were 13 years old.
The following developmental pattern is suggested: at an early age, say up to about eight years, the child chooses as his Ideal Person a parent or parent substitute. (Here we are adopting Havighurst's view since our own study has no information on this period). Presumably this choice is prompted by the child's psychological needs as well as by his rather limited experience of other adults. During the next stage the child enters the period of the fantasy or wish-fulfillment choice. Here too, there is likely to be a transitional and overlapping phase. When approaching adolescence, the child enters the period of the reality choice, probably again going through a transitional stage in the process. To summarise there may be five stages:

Stage 1. - up to approx. 8 years: parent or parent surrogate chosen as Ideal Person.

Stage 2. - a transitional phase.

Stage 3. - up to approx. 13 years: a fantasy, wish fulfillment or otherwise glamorised choice. Ideal Person really means Idealised Person here.

Stage 4. - a transitional phase.

Stage 5. - from approx. 13 years on: Ideal Person is appraised realistically. Often a moral choice and in this sense it may be idealistic. The chosen figure can be oneself, or some other existing person or a composite, abstract figure embodying a number of attributes. The unifying characteristic of the ideal figure in this stage is the element of realism.

The question arises where the MI-choice, (namely what we called the 'lip service to moral ideals') is to be accommodated in this new scheme. It is suggested that this is not a separate developmental stage - though only a thorough longitudinal study could decide this point - but that individuals giving these responses are concealing fantasy ideals normal to children of their age. As noted earlier, children demonstrating such behaviour perform extremely poorly on I.Q. and attainment tests.

Large variations appear to exist between the ages at which individual children enter the various stages. What then is normal? Clearly this is partly a matter of population studied. Girls appear to progress through the stages more quickly than boys and children of high socio-economic status quicker than those of low socio-economic status. (This follow-up study incidentally confirms the last mentioned
in fact which will be reported in detail elsewhere.) Conversely, what constitutes retardation? If the findings of the present study in respect of the links* between attainment, intelligence and the various stages of Ideal Person choices are confirmed by subsequent studies, a possible answer may be along these lines: if a child is making satisfactory school progress in relation to his own potential or his true peers (whichever is the more appropriate measure) he may be said to be progressing and developing normally for him, no matter what stage of Ideal Person choice he is in. A fantasy choice at 15+ cannot in itself be taken as an indication of any mal-functioning or retardation, since there is considerable individual variation in these matters. However, where an early stage Ideal Person choice is coupled with poor academic performance, there is a case for speaking of the child as retarded or arrested in his over-all personality development. (On this general point see also Pringle and Gooch 1965b). Moreover the failure in school work may be suspected as springing, to some extent at least, from a preoccupation with the (fantasy) goals of an earlier period. Such preoccupation is likely to become increasingly a source of estrangement between child and school as well as child and parent which may possibly culminate in rebellion against or withdrawal from the demands of the adult or reality world.

V. Conclusions and Recommendations

Firstly there seem to be definable stages of development in the choice of Ideal Person in the growing child. Secondly these stages inter-link not so much with chronological age as with level of maturation and not so much with measured intelligence as with level of attainment. Thirdly, the description of the Ideal Person together with a knowledge of academic performance may possibly constitute a potentially useful diagnostic tool in the assessment of retardation in personality development; it looks as if the likely combination is an early-stage choice coupled with poor attainment, especially where the I.Q. is relatively high. In such cases the academic failure would probably best be regarded not by additional coaching but by discovering why the particular child is unwilling or unable to make the transition to the next stage of development.

* That these links are not as simple as they perhaps appear may be seen from the fact that the M2-M2 group contains not only the child with the highest Cornwell I.Q. (120), but the one who has the lowest, (I.Q. 64). (Interestingly enough, the latter boy was chosen as Ideal Person by the boy who wrote 'I can trust him. He is nice. He is kind',) It may be that some children of very low intelligence, by reason of their special needs, are more appreciative of moral qualities in people around them than are normal children.
Lastly and perhaps most important, it seems clear that the study of children's intelligence and scholastic progress cannot be divorced from that of their total personality development, convenient though it might be to do so. The immediate need is for further longitudinal studies of the kind undertaken here, and incidentally, for a thorough re-examination of our current models of progress and its measurement.
SECTION 4.4  Judgement of Wickedness. Part 1.*

1. Introduction

In a pioneer study, Macauley and Watkins (1926), as part of an investigation of children's moral development, asked 2,320 subjects aged from approximately 8 to 19 years, of varying educational and socio-economic backgrounds, to 'make a list of the most wicked things anyone could do'. The purpose of the study was not so much to establish the relative order of wickedness which children assign to different offences, but to investigate how this order changes with age and social conditions. The enquiry was conducted in one city. Results are not reported in the form of a statistical survey, as the authors felt this would be misleading. However, general conclusions are drawn. The authors found that up to the age of approximately 9 years wicked deeds given consist of a series of small, personal acts that the child has been taught to regard as wrong. There is an almost complete lack of generalisation, i.e. no general categories like stealing, but instead a list of objects not to be stolen. In Stage 2, around 9 to 10 years of age, generalisations begin to appear. However, the wicked acts quoted are in the main still conventional and impersonal. In Stage 3, from 11 to 13 years, the authors suggest that "the child is surveying the world from afar at second hand". He is involved by projection not by participation. At this age crimes such as piracy, embezzling and smuggling appear. This period is claimed as the most amoral period. Crimes of the spirit are recorded but without a feeling of conviction. Around 14 year of age a fourth stage begins. In the author's view this is marked by a break-away from conventional, uncritical morality. Offences are qualified, mitigating circumstances are advanced. An individual, personal morality begins to appear. There is a reduction in the incidence of legally punishable offences and the more sensational crimes tend to disappear. Sins of the spirit (selfishness, hypocrisy) and sexual offences come to the fore. A sense of responsibility to one's fellows develops. Later, around 1½ for boys and 1½ for girls, a sense of civic responsibility also appears.

* This sub-section was prepared for separate publication as a 2-part paper (Pringle and Gooch 1966) and is here presented substantially in that form. Therefore Tables for the incidence of Wicked Deeds in terms of the school-sex groups are not presented. However, the stages discussed tend to be reached earlier by girls than by boys, and Townsend as a whole reaches them somewhat earlier than Parkside as a whole.
At all ages and levels the most frequent crimes were found to be murder, stealing and lying.

The authors further note a general but no very close relationship between intelligence and the capacity to pass moral judgements. However, it was found that children of a given age who produced lists more characteristic of younger children, although no less bright than their contemporaries also exhibited marked behaviour problems. On the other hand, children of low attainment or intellectual retardation, but "having good school characters" generally listed actions characteristic of their age-group.

Edwards (1959 and 1965) also employed the Macauley and Watkins procedure on Wicked Deeds as part of his study of moral attitudes among boys in a secondary modern school. All the first year boys, aged 11-12 (N = 100) and all the fourth year boys, aged 14-15 (N = 129) were given the task. Results are reported in terms of incidence of each Wicked Deed. There is considerable similarity in the frequency of the various Wicked Deeds mentioned by the younger and the older boys, with both groups producing murder, physical cruelty, stealing and cruelty to animals as the four most wicked deeds, in that order. However, Edwards notes that the younger boys were generally much less capable of generalisation than the older ones. Furthermore the younger boys tended to produce mixtures of serious and trivial offences, but this was also true of the duller boys in the older group.

Pringle and Edwards (1964), again as part of a larger study of children's moral development and again using the original experimental design of Macauley and Watkins, gave the same task to a sample of 226 eleven-year-old junior school children. Results were reported in the form of percentage mention of the various Wicked Deeds, but broken down both for sex and in terms of three ability groups described as Able, Average, and Low Average/Dull. The four Wicked Deeds mentioned most frequently were murder, physical cruelty, stealing and cruelty to animals, in that order. There were, however, statistically significant differences on a number of Wicked Deeds between boys and girls (e.g. stealing, lying) and among the three ability groups (e.g. murder, lying). Girls produced a higher average number of Wicked Deeds than boys, and older children a higher average number than duller children.

2. Subjects and Methods

A sample of 35 boys and 46 girls aged 15 years at four secondary
modern schools in the Midlands were asked (in June 1964) to 'make a list of the most wicked things that anyone could do'. They were allowed ten minutes for the task. This procedure was that used by Macaulay and Watkins in 1926. No help of any kind was given by the experimenters, other than to clarify the instructions in a slightly expanded form for the benefit of one or two children. At the end of ten minutes the children were further asked to rank the six worst deeds in their list in order of wickedness, giving rank order 1 to the most wicked. Thus both the child's first thought and his considered first choice were obtained.

The scripts were subsequently sorted into three categories on the basis of I.Q., using the Terman-Merrill Intelligence Scale (1937) Form 1.* The groupings were as follows:

(1) Able (I.Q. 121 to 168) N = 8
(2) Average (I.Q. 95 to 120) N = 42
(3) Low Average/Dull (I.Q. 74 to 94) N = 31

This procedure was adopted specifically to form a basis for comparison with the Pringle and Edwards (1964) study.

3. Results

As a first step the Wicked Deeds at 15 years were tabulated according to the number of children mentioning a particular deed. The results are shown in Table 18 with breakdowns for sex and the three ability groups. The W.D.'s are listed in rank order of preference by the total sample, the most popular deed appearing first. Statistical significance was investigated by chi-square and levels of significance where reached are indicated.

W.D.'s involving less than 5% of the population were not shown tabulated. They included the following: sacking people, shutting people up in small rooms, cruelty (unspecified), class distinction,

* Terman-Merrill I.Q's were used here for reasons of comparison with the earlier study by Pringle (1963). For general validation purposes I.Q's obtained on the Cornwell test have been used.
### Table 18

Wicked Deeds at 15 years according to sex and intelligence

<table>
<thead>
<tr>
<th>Category</th>
<th>N=33</th>
<th>N=35</th>
<th>N=46</th>
<th>N=8</th>
<th>N=42</th>
<th>N=31</th>
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<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Boys</td>
<td>Girls</td>
<td>Able</td>
<td>Average</td>
<td>Dull</td>
</tr>
<tr>
<td>Murder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>78</td>
<td>23</td>
<td>*66</td>
<td>40</td>
<td>87</td>
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<tr>
<td>Promiscuity</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cruelty to animals</td>
<td>54</td>
<td>67</td>
<td>22</td>
<td>83</td>
<td>32</td>
<td>70</td>
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<td>Stealing</td>
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<td>57</td>
<td>18</td>
<td>61</td>
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<td>61</td>
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<tr>
<td>Physical cruelty</td>
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<td>53</td>
<td>23</td>
<td>*66</td>
<td>20</td>
<td>*43</td>
</tr>
<tr>
<td>Damage to property</td>
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<td>40</td>
<td>11</td>
<td>31</td>
<td>20</td>
<td>43</td>
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<tr>
<td>Cruelty to children</td>
<td>27</td>
<td>33</td>
<td>6</td>
<td>**17</td>
<td>21</td>
<td>**46</td>
</tr>
<tr>
<td>Lying</td>
<td>25</td>
<td>31</td>
<td>7</td>
<td>20</td>
<td>18</td>
<td>39</td>
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<td>19</td>
<td>4</td>
<td>11</td>
<td>11</td>
<td>24</td>
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<tr>
<td>Mental cruelty</td>
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<td>16</td>
<td>2</td>
<td>6</td>
<td>11</td>
<td>24</td>
</tr>
<tr>
<td>Failure to relieve suffering</td>
<td>12</td>
<td>15</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>31</td>
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<td>Sex offences</td>
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<td>11</td>
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<td>Swearing</td>
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<td>War world destruction</td>
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<td>11</td>
<td>5</td>
<td>14</td>
<td>4</td>
<td>9</td>
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<td>Racial discrim.</td>
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<td>14</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>50</td>
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<td>Kidnapping</td>
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<td>10</td>
<td>4</td>
<td>11</td>
<td>4</td>
<td>9</td>
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<td>Drinking</td>
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<td>6</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>11</td>
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<td>Using/exploiting people</td>
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<td>5</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>4</td>
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<td>Letting someone down</td>
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<td>0</td>
<td>0</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
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<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Blaming someone unjustly</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

*p < .05  **p < .01
truanting, stirring up fights, rudeness, backbiting, laziness, taking the easy way out, forcing people against their will, dirty habits, boasting, taking people's lives in your hands, causing drug addiction, gambling, boys sweeping chimneys, drought, breaking the law, starvation, selfishness, untidiness, weak will, stop everyone working, poverty, stop people eating, stop people drinking, debt, getting involved in something not your business, put someone to death who is innocent, divorce (in certain circumstances), abortion.

Table 19 shows the results in the same form for the same children at age 11, less one whole script unfortunately been lost. Statistical significance is indicated.

W.D.'s given by 11 year olds involving less than 5% of the population include: not believing in God, A and H bombs, haughtiness, rudeness, blackmail, cheating, insulting behaviour, spitefulness, arson, smuggling, spying, spitting, making threats, disobeying, hateful behaviour, being cheeky, mental cruelty, treason, truanting, caning, slave trade, jealousy, drunkenness, strikes, divorce, smoking, throwing stones, forgery, witchcraft, playing cards on Sunday, not washing, boasting, ignorance, children being left alone at night, offences against old people, cutting up the Union Jack, being lost at 11 p.m., phonetapping.

No separate table is shown for differences in responses between 11 and 15 years. Firstly because these differences can be obtained by inspection of Tables 1 and 2 and secondly because, in that the average number of W.D.'s per child increases between 11 and 15 years from 4.2 to 9.2 (Table 4), it is likely that the incidence of any given deed will tend to be greater (the number of W.D.'s that come readily to mind being fairly finite). By the same token, however, a decrease in the incidence of a particular deed at 15 years is likely to be meaningful. Categories which decrease in incidence between the ages of 11 and 15 are:

For boys (able): Murder (N = -6 = -19%)

For girls (dull): Physical cruelty (N = -4 = -9%)

These differences were too slight to permit statistical investigation.

The preceding results refer to group behaviour. When individual differences were inspected by means of a 2 x 2 chi-square on the basis
Table 19

Wicked Deeds at 11 years according to sex and intelligence

<table>
<thead>
<tr>
<th>Category</th>
<th>N=80 Total</th>
<th>N=34 Boys</th>
<th>N=46 Girls</th>
<th>N=8 Able</th>
<th>N=42 Average</th>
<th>N=30* Dull</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Murder</td>
<td>59</td>
<td>74</td>
<td>29</td>
<td>85</td>
<td>31</td>
<td>67</td>
</tr>
<tr>
<td>Physical Cruelty</td>
<td>44</td>
<td>55</td>
<td>20</td>
<td>59</td>
<td>24</td>
<td>52</td>
</tr>
<tr>
<td>Stealing</td>
<td>40</td>
<td>50</td>
<td>13</td>
<td>33</td>
<td>26</td>
<td>57</td>
</tr>
<tr>
<td>Cruelty to animals</td>
<td>27</td>
<td>34</td>
<td>9</td>
<td>26</td>
<td>18</td>
<td>39</td>
</tr>
<tr>
<td>Swearing</td>
<td>9</td>
<td>11</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Lying</td>
<td>6</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Damage to property</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Blaming someone else</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Kidnapping</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

None of these differences reaches significance at the .05 level.

* One of the scripts of the dull 11 year olds was unfortunately lost, hence N=30.
of whether individuals at 15 years did or did not change their minds about mentioning a particular wicked deed in their list which they had of had not included at 11 years, rather greater differences were observed. The following differences were significant at the levels indicated:

For all children: Murder (p < .001)

For all children: Cruelty to Animals (p < .02)

For girls only: Lying (p < .001)

In respect of the scripts for the 15 year olds only, the subjects were asked to rank their six most wicked deeds in order of wickedness. Therefore, the child's first thought and his considered opinion of first choice were obtained. The group results for the two contingencies, expressed as percentages, are shown in Table 20. Only those deeds used by more than 6% of the total population are shown.

Other W.D.'s used either as first thought or first choice are:

First Thought: Cruelty to children, blow up the world, when an old lady who is blind is carrying a basket with a lot of goods in it and somebody just pinches the basket of her, (boy, I.Q. 86), cheek, blaspheme (girl, I.Q. 127), destroying people property, swear (girl, I.Q. 79), make fun of other people, cheating, crime, ignore pleas for dā from disaster-stricken areas, pull your nails out (boy, I.Q. 98), boys sweeping chimbeys (boy, I.Q. 92)

First choice: Making a person a slave, to wreck trains, vandalism, to rip somebody is eyes out (boy I.Q. 74), blow up the world, to betray God (girl, I.Q. 80), take someone's life in your hands, worship some God apart from our God (girl, I.Q. 105), blaspheme (same girl as above), the World (Man) (boy, I.Q. 135), racial prejudice, pull your nails out (same boy as above), sexual assault on children and adults (boy, I.Q. 123)

Table 21 shows the average number of W.D.'s for the various sub-groups (a) at 11 years for the total original population of which the present follow-up population is a part, (b) at 11 years for only those children who later formed the follow-up population and (c) at
<table>
<thead>
<tr>
<th>Category</th>
<th>1st Th.</th>
<th>1st Ch.</th>
<th>1st Th.</th>
<th>1st Ch.</th>
<th>1st Th.</th>
<th>1st Ch.</th>
<th>1st Th.</th>
<th>1st Ch.</th>
<th>1st Th.</th>
<th>1st Ch.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murder</td>
<td>*44</td>
<td>*54</td>
<td>*34</td>
<td>*49</td>
<td>*52</td>
<td>*59</td>
<td>3</td>
<td>0</td>
<td>*43</td>
<td>*64</td>
</tr>
<tr>
<td>Cruelty to animals</td>
<td>20</td>
<td>10</td>
<td>26</td>
<td>3</td>
<td>15</td>
<td>15</td>
<td>1</td>
<td>1</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>Stealing</td>
<td>10</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Physical cruelty</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>14</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

*p < .01  
**p < .001
Mean number of Wicked Deeds for various groups and sub-groups at 11 and 15 years

(a) Total Pringle and Edwards (1964) population at 11 years (21 scripts available)

<table>
<thead>
<tr>
<th></th>
<th>Able</th>
<th>Average</th>
<th>Dull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>6.6  (N=31)</td>
<td>4.2     (N=63)</td>
<td>3.4   (N=15)</td>
<td>4.8      (N=109)</td>
</tr>
<tr>
<td>Girls</td>
<td>6.8  (N=43)</td>
<td>5.9     (N=46)</td>
<td>3.8   (N=23)</td>
<td>5.8      (N=112)</td>
</tr>
<tr>
<td>Total</td>
<td>6.7  (N=74)</td>
<td>4.9     (N=109)</td>
<td>3.7   (N=38)</td>
<td>5.3      (N=221)</td>
</tr>
</tbody>
</table>

(b) For the follow-up sample only at 11 years (80 scripts)

<table>
<thead>
<tr>
<th></th>
<th>Able</th>
<th>Average</th>
<th>Dull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>5.7  (N=4)</td>
<td>3.8     (N=19)</td>
<td>3.7   (N=11)</td>
<td>3.2      (N=34)</td>
</tr>
<tr>
<td>Girls</td>
<td>4.7  (N=4)</td>
<td>5.9     (N=23)</td>
<td>3.7   (N=19)</td>
<td>4.9      (N=46)</td>
</tr>
<tr>
<td>Total</td>
<td>5.3  (N=8)</td>
<td>4.9     (N=42)</td>
<td>3.7   (N=30)</td>
<td>4.2      (N=80)</td>
</tr>
</tbody>
</table>

(c) For the follow-up sample at 15 years (81 scripts)

<table>
<thead>
<tr>
<th></th>
<th>Able</th>
<th>Average</th>
<th>Dull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>10   (N=4)</td>
<td>8.3     (N=19)</td>
<td>9.3   (N=12)</td>
<td>8.5      (N=35)</td>
</tr>
<tr>
<td>Girls</td>
<td>9    (N=4)</td>
<td>10.3    (N=23)</td>
<td>9     (N=19)</td>
<td>9.7      (N=46)</td>
</tr>
<tr>
<td>Total</td>
<td>9.5  (N=8)</td>
<td>9.4     (N=42)</td>
<td>9.1   (N=31)</td>
<td>9.2      (N=81)</td>
</tr>
</tbody>
</table>
15 years for this follow-up group. It will be noted that the number of the two able sub-groups are small (N=4).

4. Discussion of Results

Developmental trends

All the features of Macauley and Watkins' (1926) first three stages were in evidence at 11 years in the scripts of the follow-up sample. However, they were by no means entirely absent from the scripts of the 15 year olds. Nevertheless, the generalisation that the 11 year olds were more inclined to confuse the serious and the trivial and less able to generalise than the 15 year olds were confirmed in our sample. Among the 15 year olds some evidence of Macauley and Watkins' stage 4 was found, i.e. offences qualified by reference to circumstances (e.g. divorce, abortion, etc.), sins of the spirit (hypocrisy, betrayal, etc.) and a sense of responsibility to one's fellows: that is, the beginnings of a personal morality.

While murder topped the list both at 11 and 15 years, with stealing in third place, it was not possible to agree entirely with Macauley and Watkins' finding that the most frequent crimes at all ages were murder, stealing and lying. In the present study lying takes sixth place at 11 and seventh place at 15. (Nevertheless the percentage of mentions of this category increased by 25% at 15, although this is likely to be in part a reflection of the general increase with age in number of Wicked Deeds). Edwards (1959) found murder to occupy the first place at both 11+ and 15, with stealing at third place on both occasions, while lying occupies tenth place at 11+ (only 6% of children) and receives no mention at all at 15 from the 132 children involved. However, what is probably more important is the common pattern of development which may underlie these differences of detail. It would seem that there are likely to be considerable variations in the incidence of particular W.D.'s from region to region and from generation to generation, such as have been observed in connection with Ideal Person studies (Pringle and Gooch, 1965). Unifying concepts, such as those proposed by Macauley and Watkins, appear therefore to be required to demonstrate common underlying conceptual and developmental patterns, should these exist.

As far as the population of the present study is concerned, new entries to the 'Top Nine' between 11 and 15 years are cruelty to children, religious offences and mental cruelty. The girls are principally responsible for these changes, but the jump to second place by
cruelty to animals is due to the combined influence of both boys and girls. From the first nine at 11 years swearing, blaming someone else and kidnapping have been lost. In this affluent society and the age of betting shops only 5 per cent of the 15 year olds consider coveting money to be wicked and even less consider gambling to be such. It is also of interest that, in a country often said to be a stronghold of social intolerance, only one mention of class distinction was found.

Sex Differences

At 11 years a significantly higher percentage of boys than girls consider murder to be wicked but at 15, the trend is completely reversed. Discussion of the possible meaning of this and allied trends is postponed until Part II.

There are, additionally, other consistent differences between the sexes. Both at 11 and 15 certain Wicked Deeds receive a higher rate of mention from girls than from boys (cruelty to animals, stealing, damage to property, lying, swearing). However, since girls in any case produce a higher average number of W.D.'s than boys (average number of W.D.'s for girls at 11 years = 4.9, at 15 years 9.7, while boys average 3.2 and 8.5 respectively on the two occasions), a higher incidence of a particular W.D. among the girls is likely to follow from this alone*. However, the differences between girls and boys in respect, for instance, of cruelty to children and mental cruelty are probably large enough to make these categories reliable indicators of sex differences. Categories 'over-chosen' by the boys are likely to constitute good indicators of a sex difference on the boys' side) include physical cruelty, kidnapping, murder (at 11 only) and war world destruction (at 15 only).

For many of the boys physical cruelty involved cutting off parts of the body and scarring, the type of material that a Freudian would tend to classify as fear of castration. For example, one boy's

* In the follow-up sample, but not in the total original population, the girls of average ability produce a slightly higher mean number of W.D.'s than the able group of girls. Since the able group, however, consists of only four girls, this need not be a finding of any significance. Nevertheless, it is possible that increasing powers of synthesis may reduce the mean number of W.D.'s for the brighter children in the long run. This may also be responsible for the ceiling effect mentioned earlier.
list read: 'to rip somebody is eyes out, to cut somebody is ears off, to cut somebody is fingers off, to cut somebody is hand, to take all the eggs out of a nest, to put somebody in a seller with rats in it.' Another's read: 'to pull your nails out, peck your eyes in, pull your body to pieces bit by bit, hanging you up by your hand or finger over pits of snakes that snap at you'. It is, of course, possible to dismiss these as simply 'schoolboy horrors' (though this is not really an explanation). Moreover, the presence in the first boy's list of the apparently harmless 'take all the eggs out of a nest' is interesting in its context and not easy to account for, in other than Freudian terms, when it makes rather good sense.

Accordingly, it was decided to count the references to mutilation. It was found that seven boys (20%) at 15 year gave a total of seventeen mentions, while the girls made no mention of it at all. At 11 years again seven boys (six of them different boys from the 15 year old) made eight mentions, while one girl made one mention. While these figures were too small to permit a chi-square test, it appears that physical cruelty and in particular mutilation are of more importance to boys than girls. As a possible alternative to the Freudian hypothesis, the writers suggest that the anxiety (relish?) expressed in these W.D.'s may arise from fear, or perhaps guilt, generated by contemplated aggression and its consequences, the aggression in turn possibly activated by residual instinctive drives during adolescence. Or, in terms of social role, that boys are beginning at this age to identify more thoroughly with the stereotype of the male as fighter or aggressor, in some cases linked with anxiety about their adequacy in filling the imagined role. Similar arguments, i.e. residual instinctive drives and social role could be advanced to account for the greater concern by girls over cruelty to children.

Cruelty to animals, taking second over-all place at 15 years, is a frequent choice for both boys and girls. (However, boys reduce the frequency of this category by 23% after reflection, i.e. from first thought to first choice). By placing cruelty to animals so high in the list the children are behaving in fact according to the foreigner's stereotype of Englishmen. In some cases, particularly for the girls, it seems that animals may be psychologically equivalent to siblings or babies. Analyzing 'Best Moment' scripts where the subjects of the present enquiry were asked to describe the best moment of their lives, it was found that 55% of the children, the group admittedly being small (namely 5 out of 9), choosing the gift of a pet as their best moment were only children, whereas the incidence of only children in the total population was merely 14% (11 out of 81). The pets, moreover, were frequently described as 'being like a baby' or 'one of the family'.
First thought and first choice

It is difficult to decide whether first thought or first choice has the greater significance, or whether both have equal potential as indicators, relating however to different behaviour systems. So that first thought might possibly have unconscious undertones and link more to a 'personal' conscience, whereas first choice might be a more rational or logical decision having reference more to 'social' conscience. As Grinder (1964) suggests in a recent paper: 'It seems one ought to speak not of conscience but of consciences.' However, there are some objections to this proposal, one being that boys increase mention of physical cruelty as first choice. Since it was suggested earlier that this is a W.D. having possible unconscious associations one would expect it therefore, in terms of the hypothesis just advanced, to be more likely to occur as first thought.

On reflection, murder is up-graded by both boys and girls and by all ability groups except the able, who down-grade it. Physical cruelty is up-graded on reflection by boys, by children of average ability and by the dull. The question of abler children down grading murder will be raised again in Part II of the paper. All other categories are either down-graded on reflection, i.e. as first choice, or held steady.

Number of Wicked Deeds

Table 4 shows a regular and reliable relationship between ability and mean number of Wicked Deeds, with the exception of able girls—a very small group, however. The more intelligent children tend to produce longer lists of W.D.'s.

At 11 years girls in general produce more W.D.'s than boys. At 15 years both the able and the dull girls are producing lower means than the corresponding groups of boys.

Conclusions

It appears from comparisons with other studies that considerable variation exists in the Wicked Deeds chosen by different populations. Sex, age and intelligence are among the variables that can significantly affect the choice. Significant changes are also observed between immediate response (first thought) and more considered opinion (first choice).
There are some indications, however, of the common developmental patterns which may underlie regional and population differences, e.g. greater powers of generalisation and increasing ability to distinguish between the serious and the trivial with increasing age. Part II of the present paper attempts the demonstration of some of the less obvious patterns of development observed in this longitudinal study.

Judgement of Wickedness. Part 2.

1. Introduction

Since the present data breaks new ground, possibly in the wealth of psychological data available for cross-reference and because of its longitudinal form, it is not possible to review earlier studies as is customary. However, a number of other investigators (Havighurst et al. 1946, 1955, 1965; Macaulay and Watkins 1926; Pringle and Edwards 1964; Veness 1962; and West 1958) have worked with similar open-ended projective techniques and provided a basis for the present analysis. A further paper by the present authors (Pringle and Gooch 1965) has attempted a similar analysis to that which follows in respect of 'Ideal Person' data, again investigated longitudinally.

The starting-point for the conclusions described and discussed below was the incidental observation that the duller children at 15 years were responding in ways similar to those in which the brighter children had responded four years earlier at the age of 11; while the latter group at 15 years had abandoned these responses in favour of yet others. This phenomenon had also been noted during the analysis of the 'Best Moment of My Life' scripts and 'Ideal Person' scripts (Pringle and Gooch op. cit.). Examples of this process at work are given in 4 below, each perhaps neither statistically significant in or otherwise meaningful in isolation, but difficult to ignore as part of an over-all trend.

2. Subjects and Methods

These are identical with the details given in Section 4:4, Part 1 (pp 113-114).
3. Results*

Full results are given in Part I of this paper (Pringle and Gooch 1966) for: (1) the incidence of particular Wicked Deeds both at the age of 11 and 15 in respect of the population studied; (2) for the incidence of particular W.D.'s as first thought and first choice (at 15 only) and (3) for the average number of W.D.'s given by the various sub-groups, i.e., boys, girls, able, average and dull children, again both at 11 and 15 years.

These results are not repeated here since they are essentially reports of group behaviours; the concern of this paper is principally with individual responses and with changes in them. Group results may reflect a picture of what individuals are doing but this is not necessarily so; indeed, group results may effectively mask a complete reversal in the response of every individual in the group. To take a hypothetical case: if a group of subjects were asked a question on one occasion, to which 50% respond "yes" and 50% "no", and on a subsequent occasion, when asked the same question again, all changed their minds (all those who previously said "yes" now say "no", and vice versa) the group result would in no wise have changed; yet for the individuals concerned there would have been maximum possible reversal.

The results of those aspects and areas of the study which are required for an understanding of the position advanced at this point of the paper are given as necessary in the body of the text. For the fuller and more general results of the study the reader is referred to Part I (Pringle and Gooch 1965a).

*In respect of the tables produced here no tests of statistical significance have been applied. The authors are aware that the size of the differences noted, in conjunction with the small number of children involved, would not yield such significance in every case. Nevertheless they feel that the trend of the differences is both clear and worthy of report. Naturally the work requires repeating with larger samples. The purpose of the present paper is to draw attention to the potential of this type of data.
4. Some examples of 'response reversal' between 11 and 15 years

As stated, the starting point of the considerations with which this paper is concerned was the observation during the analysis of the 'Best Moment of My Life' scripts that the duller children at 15 years were responding in ways in which the brighter children had responded at 11 years; and that the brighter children at 15 had abandoned their responses in favour of yet others. This pattern was subsequently found to be repeated in other projective data obtained from this population. However, for the purpose of illustration only a few instances are given of this process at work in the data of the present study.

Table 22, shows the changes (increase or decrease) in incidence between 11 and 15 years for the three ability groups of the responses (a) mention of murder, (b) mention of murder as first thought and (c) mention of stealing. The figures for boys and girls are taken together.

The trend of the responses is clear. The dull group is in the process of acquiring the behaviours concerned, the able group is losing them. The average group makes either smaller losses (than the able group) or smaller gains (than the dull group).

It is worth pointing out that such a trend would probably have been undetectable in a horizontal study, that is one which used one group of 11 year olds and another set of 15 year olds, by reason of the considerable response differences which appear to exist between different populations (Pringle and Gooch 1966). In particular the regular direction of the differences would almost certainly not have been shown.

For a further simple demonstration of the fact that brighter children respond earlier in ways in which duller children respond later, mean number of Wicked Deeds may be considered.

At 11 years the group of able children were producing a higher mean number of W.D.'s than the average group, who in turn were producing a higher mean of W.D.'s than the dull group. The mean figures were:

Able group: 5.3. Average group: 4.9. Dull group: 3.7.

On the present proposal therefore the prediction is that both the average and the dull groups would increase their mean number of W.D.'s
Table 22
Percentage changes between 11 and 15 years for three responses

(a) Mention of murder

<table>
<thead>
<tr>
<th></th>
<th>Able (N=8)</th>
<th>Average (N=42)</th>
<th>Dull (N=31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 11 years</td>
<td>100</td>
<td>81</td>
<td>57*</td>
</tr>
<tr>
<td>At 15 years</td>
<td>63</td>
<td>79</td>
<td>81</td>
</tr>
<tr>
<td>% increase or decrease</td>
<td>-37</td>
<td>-2</td>
<td>+26</td>
</tr>
</tbody>
</table>

(b) Mention of murder as first thought

<table>
<thead>
<tr>
<th></th>
<th>Able (N=8)</th>
<th>Average (N=42)</th>
<th>Dull (N=31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 11 years</td>
<td>75</td>
<td>60</td>
<td>47*</td>
</tr>
<tr>
<td>At 15 years</td>
<td>38</td>
<td>43</td>
<td>49</td>
</tr>
<tr>
<td>% increase or decrease</td>
<td>-37</td>
<td>-17</td>
<td>+3</td>
</tr>
</tbody>
</table>

(c) Mention of stealing

<table>
<thead>
<tr>
<th></th>
<th>Able (N=8)</th>
<th>Average (N=42)</th>
<th>Dull (N=31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 11 years</td>
<td>75</td>
<td>45</td>
<td>47*</td>
</tr>
<tr>
<td>At 15 years</td>
<td>25</td>
<td>57</td>
<td>65</td>
</tr>
<tr>
<td>% increase or decrease</td>
<td>-50</td>
<td>+12</td>
<td>+19</td>
</tr>
</tbody>
</table>

*One script (at 11 years) was lost for the dull group. The percentage in this case is therefore based on N=30.
on a later testing occasion, given that a reasonable time has elapsed. (In the present instance four years elapsed between the two test occasions.) This prediction is borne out. The figures for mean number of W.D.'s at 15 years are:


The two duller groups are in fact well past the mark set by the able group at 11 years, which is not altogether surprising, unless one expects the brighter children to be functioning at 11 years of age already at a level beyond the potential ceiling of the duller children.

However, in addition, some kind of general ceiling effect appears to have come into play. It is unlikely that this is wholly an artifact of the ten minutes allowed for the task or of the relatively finite number of W.D.'s that come readily to mind, since several individuals produced as many as 15 and 20 W.D.'s. It is as likely to depend on increased powers of synthesis and generalisation and other factors of this type.

It is interesting to note that if we take increase in the mean number of W.D.'s between the age of 11 and 15, the dull group has made most 'progress' and the able group least. The actual mean increases are:

Able group: +3.8. Average group: +4.5. Dull group: +5.4.

Clearly, where some kind of ceiling is involved, the amount of progress possible depends partly on starting distance from the ceiling. Those who start further from the ceiling have greater opportunities for progress. This consideration appears to be largely overlooked in current concepts of progress.

5. The implications of 'response reversal'.

In the previous section examples have been given of duller children at a later age responding very much as brighter children responded at an early age. There are two main implications which follow from this evidence. One is that the dull children do not so much have a lower potential than the bright group as a tendency to reveal or develop potential more slowly. The second is that a developmental or maturational factor must be involved, which would appear to be at least partially independent of variations in environment.
On the aspects of the data considered, namely mean number of Wicked Deeds and type of W.D. chosen, there is no evidence to suggest that the dull child follows a different course in his development from the brighter child. There is, moreover, little to suggest that he would not complete the course, given time. It may be that whenever the dull child fails to complete 'the course' - using this term now in a general sense - he does so because we mistakenly pull him out of the race at some point, or more probably create conditions (like asking him to take longer strides than he is capable of) which cause him to opt out of it.

Be this true in a general sense or not, it does appear that responses to certain projective measures by children are at least partly maturationally determined and to this extent develop in their own good time. There is therefore some justification for speaking in this connection of stages of development. The remainder of the paper outlines the search that was undertaken for possible further indices and correlates of these proposed stages.

6. Indices and correlates of some proposed stages of development

Pringle and Edwards (1964) had found the incidences of mention of murder, of stealing and of lying to yield statistically significant differences among the three ability groups at 11 years of age. It appeared likely, therefore, that these would prove to be the best indices of the hypothesised stages of development. However, it was questioned whether the responses of the follow-up sample at 11 years would of necessity typically reflect the pattern of responses of the original parent population at that time. Consequently the scripts at 11 years of the follow-up sample alone were re-worked.

As a result of this re-appraisal and a certain amount of piloting, it was decided that mention of murder, for girls only, and mention of lying for boys and girls taken together were worthwhile indicators. (Though in addition to ability differences there were also sex differences, these are not the direct concern of this paper and reference to them will be kept to the unavoidable minimum.) In the search for reliable indicators, other aspects of the data were also considered. In particular the mean rank order of certain Wicked Deeds (both as regards the order in which they were written down as well as from the final ranking in order of wickedness on instruction to do so) proved fruitful. The incidence of murder as a first thought, again for girls only, was shown to be a reliable indicator.
No explanations are attempted here as to why certain features of this projective material are good indicators of ability, or as it is hoped to show, of stages of development. Nor is a psycho-analytic interpretation of the content of the Deeds necessary or implied. The aspects chosen were chosen objectively and simply because, in the event, they could be used to establish certain sub-groups of children who were subsequently shown to differ reliably in other ways also.

Tables 23 and 23A examine the relationships between (a) mention of murder, for girls only, (b) mention of lying, for boys and girls taken together, and mean number of Wicked Deeds.

### TABLE 23

**Mean number of Wicked Deeds for children who mention or do not mention murder as a Wicked Deed at 11 and 15 years (girls only).**

<table>
<thead>
<tr>
<th>Mention Murder at 11</th>
<th>Do not mention murder at 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N=31)</td>
<td>(N=15)</td>
</tr>
<tr>
<td>5.3</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mention murder for the first time at 15</th>
<th>Still do not mention murder at 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N=11)</td>
<td>(N=4)</td>
</tr>
<tr>
<td>10.4</td>
<td>7.0</td>
</tr>
</tbody>
</table>

### TABLE 23A

**Mean number of Wicked Deeds for children who mention or do not mention lying as a Wicked Deed at 11 and 15 years (boys and girls).**

<table>
<thead>
<tr>
<th>Mention lying at 11</th>
<th>Do not mention lying at 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N=11)</td>
<td>(N=69)</td>
</tr>
<tr>
<td>7.4</td>
<td>4.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mention lying for the first time at 15</th>
<th>Still do not mention lying at 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N=22)</td>
<td>(N=48)</td>
</tr>
<tr>
<td>11</td>
<td>9.0</td>
</tr>
</tbody>
</table>
It was established earlier (Pringle and Gooch 1965A,) that a high mean of Wicked Deeds associated regularly and reliably with intelligence, both for boys and girls. Here, in every case, those said to be in the 'mention murder' and 'mention lying' stages, both at 11 and at 15 years produce a higher mean of W.D.'s. It will be noted that those who were in the 'mention murder' or 'mention lying' stage at 11 are not considered again at 15. This is a strengthening factor in the argument since, having removed from the picture the group of children proven to give longer lists, of the remainder it is again those who (now, for the first time at 15) mention murder or lying respectively who produce a higher mean of W.D.'s.

Still to some extent begging the question and speaking to terms of stages as if the case for them had been proved, it can be said that those who mention murder or lying for the first time at 15 have entered the 'mention murder' or 'mention lying' stage at some point during the intervening four years. It then also follows that those who do not mention murder or lying on either testing occasion have not yet entered these respective stages. At this point, of course, the whole matter remained purely hypothetical and conjectural, in that during a four year interval the children might in fact have been in and out of half-a-dozen stages, even if such stages existed. Apparently, however, these conjectures were not so wide of the mark. Using the descriptive concepts proposed, Table 24 considers mean measured I.Q. and mean increase in number of W.D.'s between 11 and 15 years for the groups claimed as having entered or not having entered the relevant stage during the previous four years.

The first main point of interest in Table 24 is that the two groups hypothesised to have entered the respective stage of development both have a higher mean number of W.D.'s at 11 years than the pre-stage groups and show a larger increase in number of W.D.'s at 15 years. This runs counter to the pattern of the population as a whole. In general, as shown in an earlier section, children starting further from the 'ceiling' (i.e. with a low initial number of Wicked Deeds) tend to make more 'progress' than those starting nearer the ceiling (i.e. those with a high number of W.D.'s). In this sense the in-stage groups can be considered as 'high-active'.

The second main point of this table is that despite the known regular relationship between ability and number of Wicked Deeds shown earlier, the in 'mention murder' stage group, which has a higher mean number of W.D.'s than the pre-'mention murder' group, has a lower mean I.Q. than this group. This finding, therefore, also runs counter to the pattern of the population as a whole (and to the pattern for 'mention
TABLE 24

Mean I.Q. and mean increase in number of Wicked Deeds between 11 and 15 years for certain in-stage and pre-stage groups

<table>
<thead>
<tr>
<th>Cornwell I.Q. at 11 years</th>
<th>N of W.D.'s at 11 years</th>
<th>Increase in N of W.D.'s between 11 and 15 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Mention murder' stage entered between 11 and 15 years of age (N=11)</td>
<td>90.2</td>
<td>4.5</td>
</tr>
<tr>
<td>'Mention murder' stage not yet entered by 15 years of age (N=4)</td>
<td>92.5</td>
<td>2.5</td>
</tr>
<tr>
<td>'Mention lying' stage entered between 11 and 15 years of age (N=15)</td>
<td>101.2</td>
<td>4.5</td>
</tr>
<tr>
<td>'Mention lying' stage not yet entered by 15 years of age (N=21)</td>
<td>94.2</td>
<td>3.9</td>
</tr>
</tbody>
</table>

lying') and therefore counter to expectation. While the number of the pre- 'mention murder' group is very small (N=4), there is here perhaps the first suggestion that measured I.Q. alone does not provide the whole answer to the behaviour observed in this study.

One final remark in connection with Table 24. The mean number of W.D.'s at 15 years for the able group (N=8) was 9.5. The mean number of W.D.'s at 15 years for the in 'mention murder' and in 'mention lying' stage groups was respectively 10.4 and 11.2. Here again, therefore, the suggestion that ability level alone does not tell the whole story. That there is some relation between I.Q. and number of Wicked Deeds, both for boys and for girls, is not questioned and evidence of this is provided in both Parts I and II of the paper. But it appears that it is only one factor in a more complex interaction of factors which goes to produce the behaviour and responses studied.

The stage of development characterised by mention of murder appears to precede but nevertheless to overlap with the stage characterised by
mention of lying. The grounds for these assumptions are as follows:
at 11 years mention of murder is a category almost fully subscribed as
far as the abler children are concerned. Percentage mentions were:

Able group (N=8) 100%; Average group (N=42) 81%; Dull group
(N=30) 57%.

At 15 years the stage is past its peak and losing ground among
the abler children, although still gaining ground among the dull group.
Percentages are:

Able group (N=8) 63%; Average group (N=42) 79%; Dull group
(N=31) 81%.

The stage of level fault characterised by mention of lying, how-
ever, is hardly beginning at 11 years and while gaining ground in all
groups at 15 years is far from fully subscribed. The figures are:

At 11 years: Able group (N=8) 13%; Average group (N=42) 10%;
Dull group (N=30) 3%.

At 15 years: Able group (N=8) 50%; Average group (N=42) 29%;
Dull group (N=31) 29%.

If the position outlined is really as suggested, then a number
of predictions should hold good. These are (1) that the measured intel-
ligence of those who mention murder at the age of 11 will be superior to
that of those who do not; (2) that the intelligence of those mention-
ing lying at 11 will likewise to superior to that of those who do not;
(3) that the intelligence of the 15 year olds mentioning murder will be
superior to that of those who still do not; (4) that the intelligence
of the 15 year olds mentioning lying will be superior to that of those
who still do not; (5) that in addition the intelligence of those who
mention lying for the first time at 15 will also now be superior to that
of those who mention murder for the first time at 15. With one excep-
tion these predictions are borne out.

The one result not in line with prediction, and this has
been discussed above, namely that those who still do not mention murder
at the age of 15 have a higher mean I.Q. than those who do mention
murder for the first time at 15.
At the age of 11 the effects of the stages 'mention murder' and 'mention lying' seem to be cumulative, in that those who mention both (N=7) have an even higher mean I.Q. (namely 105) than those who mention one of these alone. For 15 year olds, when mention of murder is a category past its peak, the effect of (whatever personality factor lies below) mentioning both murder and lying for the first time appears to be an antagonistic one. Instead of scoring above the level of those mentioning either of these alone (as was the case at 11 years), these children have a mean I.Q. of only 91 that lies at a point between the mean I.Q.'s of those who mention lying alone and those who mention murder alone, namely 101.2 and 90.2 respectively. Quite what these results may mean in terms of personality organisation is rather difficult to imagine.

One further glance at the figures to bring our perhaps more clearly how they support the view that 'mention murder' is an earlier stage at its peak at 11 years, whereas 'mention lying' is still in a positive phase at 15 years. The figures given below refer again to girls only.

<table>
<thead>
<tr>
<th>Mention Murder at 11 (N=31)</th>
<th>Do not Mention Murder at 11 (N=15)</th>
<th>Mention Lying at 11 (N=10)</th>
<th>Do not Mention Lying at 11 (N=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>101.7</td>
<td>90.8</td>
<td>101.8</td>
<td>99.9</td>
</tr>
<tr>
<td>Mention Murder for first time at 15 (N=11)</td>
<td>Still do not mention Murder at 15 (N=4)</td>
<td>Mention Lying for first time at 15 (N=15)</td>
<td>Still do not mention Lying at 15 (N=21)</td>
</tr>
<tr>
<td>90.2</td>
<td>92.5</td>
<td>101.2</td>
<td>94.2</td>
</tr>
</tbody>
</table>

Mean I.Q. of those mentioning murder at 11 years (N=31) = 101.7
Mean I.Q. of those mentioning murder for the first time at 15 years (N=11) = 90.2
Mean I.Q. of those mentioning lying at 11 years (N=10) = 101.8
Mean I.Q. of those mentioning lying for first time at 15 years (N=15) = 101.2
Between the two 'mention murder' groups there is a difference of -11.5 I.Q. points. Between the two 'mention lying' groups the difference in I.Q. is negligible, namely -0.6 points. It appears therefore that mention of murder for the first time at 15 years is an indicator of the late developer, whereas at 11 years it was still the mark of a relatively early developer. Mention of lying at 15 years is still, as it was at 11 years, the mark of the relatively early developer.

There remains to be considered a possible objection to the interpretation of the apparent connection between the mention of murder and of lying on the one hand and intelligence on the other. It can be argued that since there seems to be a relationship between intelligence and high number of W.D.'s, and because the number of W.D.'s which readily come to mind is fairly finite, any given W.D. will tend to occur more often in a longer list than in a short one purely by chance; this would result in an apparent but spurious relationship between mention of a particular deed and intelligence.

It is very likely that the findings are influenced to some extent in this way. To put the matter to the test and in order to demonstrate that the above reasoning does not entirely account for our inferences regarding developmental stages, a comparison of the mean intelligence levels of the groups which mention lying and do not mention lying was undertaken, with the number of W.D.'s held constant. Each child from the 'lying' group was matched with the 'non-lying' children from the same school-sex group of the same year who gave the same number of W.D.'s. Where a member of the 'lying' group could not be matched, he or she was omitted from the comparison. I.Q.'s for the respective groups were summated and averaged.

The average Cornwell I.Q. of the 'lying' group at 11 years (N=7) was 98.0 and for the matched 'non-liars' at 11 (N=15) 95.4. For the 15 year olds the average I.Q. of the 'lying' group (i.e. those mentioning lying; for the first time) was 99.7 (N=15) and of the matched (non-lying) groups 96.3 (N=17). Since, then, on both occasions the mean intelligence of the groups mentioning lying is superior to that of the non-mentioners, it appears that the claimed relationship between intelligence and at least this particular category is not spurious. An inspection of the figures further revealed that where I.Q. is held constant, the 'lying' groups produce a greater average number of W.D.'s than 'non-lying' groups. This last finding is clearly still susceptible to the argument that 'lying' occurs in longer lists more often than in short lists by chance alone. On the other hand those who believe this to be the whole story must be prepared to explain for instance why at 15 years a total of 46 children producing an average 9.1 W.D.'s still fail to
mention lying, even though this is their second chance to do so (i.e., they did not mention lying at 11 either).

It is also not easy to account, other than in terms of developmental stages, for the fact that many individuals, far more than the group results of Table 25 for instance would suggest, mentioning e.g. murder, lying, physical cruelty at 11 years do not mention them again at 15 years. (It is also difficult to explain away the 'coincidence' that these children happen to be the most intelligent members of the population.) For instance, of the eleven children who mention lying at 11 only one mentions it at 15 (despite the fact that their average number of W.D.'s increases on the second occasion) and of the eight children who mentioned physical cruelty at 11 again only one mentions it at 15, again despite an increase in their average of W.D.'s.

7. Performance and progress on three standardised tests of attainment of an in-stage and a pre-stage group.

In Table 26 mean attainment scores and mean discrepancy scores are presented for three groups: those who are already in 'mention lying' stage at the age of 11; those who enter the 'mention lying' stage between 11 and 15 years; and those who have still not entered the 'mention lying' stage at the age of 15. Discrepancy scores represent the difference between actual score and predicted score calculated, in this instance, on I.Q. at age 11, by means of a regression formula. A positive score indicates relative 'over-achievement', a negative score relative 'under-achievement'.

Table 27 shows these results rank ordered by columns for the two sections, Attainment and Progress (Discrepancy Scores).

From these tables (5 and 6) it is seen that the group which enters the 'mention lying' stage between the ages of 11 and 15 has the highest number of first ranks both on attainment and progress. In addition this group has two positive discrepancy scores to the other groups' single positives. To these latest findings must be added the earlier findings that this group has a greater increase in number of Wicked Deeds during the period in question, and has a higher final number of W.D.'s than either of the other two groups. Finally, it is of great interest that this group does not have the highest mean I.Q. The group which was already in the 'mention lying' stage at 11 years has the highest mean I.Q. of the three groups, but takes only second place on attainment, on progress and on the other variable discussed. The group
### TABLE 26

Mean attainment of progress (discrepancy) scores for three groups according to developmental stage

<table>
<thead>
<tr>
<th>In 'mention lying' stage at 11 years (N=11. Mean I.Q.=102)</th>
<th>Enter 'mention lying' stage between 11 and 15 (N=22. Mean I.Q.=99)</th>
<th>Still not in 'mention lying' stage at 15 (N=46. Mean I.Q.=94)</th>
</tr>
</thead>
</table>

#### (1) Attainment

<table>
<thead>
<tr>
<th>Test</th>
<th>S/S*</th>
<th>Raw Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISC Vocal. Sub-test</td>
<td>8.5</td>
<td>8.9</td>
</tr>
<tr>
<td>Vernon Arith./ Maths. R/S*</td>
<td>38.4</td>
<td>39.7</td>
</tr>
<tr>
<td>N.F.E.R. Sec Reading Test 2</td>
<td>21.8</td>
<td>19.9</td>
</tr>
</tbody>
</table>

#### (2) Progress (Discrepancy Scores)

<table>
<thead>
<tr>
<th>Test</th>
<th>Difference Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISC Vocab. Sub-test</td>
<td>-0.3</td>
</tr>
<tr>
<td>Vernon Arith./ Maths.</td>
<td>+0.7</td>
</tr>
<tr>
<td>N.F.E.R. Sec Reading Test 2</td>
<td>+1.5</td>
</tr>
</tbody>
</table>

* S/S* = standardised score; R/S = raw score.
TABLE 27

Rank Orders and mean rank orders on attainment and progress for three groups according to developmental stage.

<table>
<thead>
<tr>
<th>Groups</th>
<th>In 'mention lying' stage at 11 years (N=11, Mean I.Q.=102)</th>
<th>Enter 'mention lying' stage between 11 and 15 years (N=22, Mean I.Q.=99)</th>
<th>Still not in 'mention lying' stage at 15 years (N=46, Mean I.Q.=94)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Attainment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WISC Vocab. Sub-test</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Vernon Arith/Maths</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>N.F.E.R. Sec. Reading Test 2</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(2) Progress (Discrepancy scores)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WISC Vocab. Sub-test</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Vernon Arith/Maths</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>N.F.E.R. Sec. Reading Test 2</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

which has not yet reached the 'mention lying' stage has the lowest rating on all counts.

As further support, similar results to those given above were found for the three groups: those in the 'mention murder' stage at 11 years; those who entered the 'mention murder' stage between 11 and 15 years; and those who still do not 'mention murder' at 15 years. The results, however, were not so clear cut, possibly due to the fact that this is a stage past its peak in the period examined.
The authors' view, on the basis of the evidence, has tended to be that entry into a stage is characterised by a general increase of mental activity. It may be asked why the very early entrants into a stage do not subsequently perform as well as those who enter it somewhat later. It would possibly be because these very early developers do not get the kind of intellectual stimulation for which they are in fact ready. They may be held back by programmes and methods which, although suitable for the majority of their age group, are not appropriate for them.

8. Summary and recommendations

It is suggested that a first case has been made out for the existence in the population studied of stages of development in regard to what is judged to be wicked. Further that these stages, in so far as they are entered early or late, relate in a general way to level of intelligence. Entry into a stage furthermore appears to be accompanied by increased mental activity, increase in scholastic progress and higher levels of attainment. These are not entirely predictable on the basis of measured I.Q. alone.

The most important single finding is that changes in an emotional or personality variable (that is, in judgement of what is wicked) appear to be linked with changes in intellectual or cognitive variables (that is, academic attainment). Should these findings hold up under further investigation, academic success will be seen to be governed by maturational and non-cognitive factors to a far greater extent than has hitherto been suspected in the normal child.

It is by no means suggested that mention of murder or mention of lying, or any other of the categories used here, are universal keys. Edwards (1965), for instance, found not a single mention of lying in a population of 132 15 year old secondary modern boys asked to write lists of Wicked Deeds. There are likely to be considerable local variations of this kind, which are further complicated by sex differences, and the particular cues to the developmental stages will need in each case to be discovered by objective examination of the data.

However, this does not mean that generalised concepts will not be found which will cut through the surface growth of local variation to reveal the phylo-genetic pattern of development, which one assumes both to exist and to be common to all children. The authors of the present paper have attempted such generalised concepts in respect of
'Ideal Person' choices (Pringle and Gooch 1965b), where similar local variation exists. By suggesting that (developmentally) early Ideal Person choices contain a greater element of fantasy, and later choices a greater admixture of reality, they were able to combine the findings of a number of different workers in a number of countries.

In the present case a possible lead is given by Piaget (1932). His view is that in the developing child a morality of constraint is replaced by a morality of co-operation. This, as it were, is the positive side of the coin. If we consider immorality, that is, crimes against morality (Wicked Deeds), and if Piaget's statement is correct, we would expect the younger child to be listing as Wicked Deeds crimes against constraint or against authority: and the older child to be listing failures of co-operation, or betrayal. This appears to be what we do in fact get. However, the small number of studies so far carried out precludes all but the most cautious claims. In leaving this point we note that lying is a failure of co-operation.

In conclusion the authors stress the need for further large-scale, longitudinal studies. They stress further the need for such studies to have also a broad horizontal basis, so that no one aspect of personality or attainment is examined independently. It appears that even the normal child's intellectual development should not be explored in isolation, however convenient it may be to do so.
Section 4:5 Retrospective Essay: Looking Back on My Life

Introduction

The idea and instructions for this essay are those used by Veness (1962). These instructions are given in full in Appendix B. They were, in summary:

(1) Write the story of your life as you look back over it from towards the end.

(2) Don't make a fairy story of it, write it as it might really be.

(3) Write about the whole of your life from the time of leaving school up to old age.

The children were allowed 40 minutes for the task.

Veness's analysis of the retrospective essays of her 1302 subjects is continuous throughout her book. Also themes are reported in a large number of tables. Therefore no attempt is made here to summarise her findings or to make direct comparisons.

The present analysis is far less detailed, due to time pressures. Several readings of the essays had shown that they mentioned certain recurrent ideas and general themes which could be fairly readily quantified. The percentage or alternatively mean incidence of the themes finally selected (from an initially longer list, some approaches having proved unfruitful) are presented in Table 28.

Discussion of the Findings

As one might have expected, the percentage mentioning marriage is in both school groups higher among girls than boys. However, there is a rather striking difference between the percentages of Townsend boys and Parkside boys in this category (73% and 45% respectively). While this finding suggests less sociability or maturity on the part of Parkside boys, differential results must be treated with extreme caution for several reasons: any item count will favour those who write longer essays. These will tend to be the children of higher attainment, the good verbalisers and those positively orientated to school work and related task. Parkside
<table>
<thead>
<tr>
<th></th>
<th>%age of subjects mentioning marriage</th>
<th>Av. number of children of the marriage</th>
<th>%age of own children envisaged going to grammar school</th>
<th>%age of own children envisaged going on to further or tertiary education</th>
<th>Subjects who settle in own town</th>
<th>Subjects who settle in another town</th>
<th>Subjects who settle in another country</th>
<th>Achievement motive</th>
<th>Mention of serious accident to self</th>
<th>Serious accident to others</th>
<th>Mean number of other people mentioned</th>
<th>Old age happy</th>
<th>Old age sad, lonely, very poor health etc.</th>
<th>Other partner dies first</th>
<th>Mention of self dying</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG (N=22)</td>
<td>86</td>
<td>1.6</td>
<td>23</td>
<td>14</td>
<td>41</td>
<td>32</td>
<td>14</td>
<td>59</td>
<td>18</td>
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Content analysis of the Retrospective Essays
boys are known to be a group with relatively low attainment and their essays are in general shorter and less rich in incident and detail. This must, at least partly be simply a function of the nature of the test, which for these boys is a limiting factor. Had the enquiry taken the form of an interview or a yes/no type questionnaire, the differences discovered by the present method might have been modified.

Both groups of boys envisage having a lower number of children than both groups of girls. Parkside boys have a lower average then Townsend boys. The question of further education (both secondary and tertiary) for their own children, is a matter which seems to interest girls rather more than boys. This fact, receives support from the finding (section 5.1) that more girls favour staying on at school after 15 (although more boys are in fact staying on after 15 than girls).

On the question of settling in the home town, another town or another country the boys are more 'adventurous' than the girls in each school-group. However, Townsend girls are only slightly less adventurous than Parkside boys in terms of settling in another town or another country; rather more of them (41%) nevertheless staking a claim on the home town, as against the 39% of Parkside boys.

The achievement motive percentages show a clear sex division. But additionally Townsend girls favour this category far more than Parkside girls. An essay was scored positively on achievement motive where the child spoke of hard work coupled with promotion; or where difficulties standing in the way of the chosen career were overcome; or where championship class was reached in some sporting activity, and so forth.

The categories 'serious accident to self' and 'serious accident to others' were chosen among other things as being possible indicators of morbidity or at least a rather pessimistic outlook. The incidence of such material is, of course, more important in connection with the study of an individual, i.e. a case-study, than of group behaviour. It appears, however, in group terms that Parkside boys have the greatest over-all tendency towards 'morbidity'. It will be noted in this connection that in the category: old age reported as sad, lonely or marked by very poor health, Parkside boys reach by far the highest percentage incidence. Both these findings appear to be in line with the evidence form Section 5:1 the the Parkside boys seem deficient (as compared with the remaining three school-sex groups) in their ability to form deep personal relationships.
The second-highest combined percentage incidence in the categories under discussion, i.e., accident to self or others, goes to Townsend girls. (The differences between groups are, of course, small.) These, as noted in Section 5, have the highest average score of maladjustment symptoms both from the teacher and the parent. However, Townsend girls achieve the lowest incidence in the category: old age sad, lonely, etc. and the highest in the category: old age happy.

The mean number of other people mentioned in the essays is higher for both groups of girls (and highest of all for Townsend girls) and lower for both groups of boys; being lowest of all for Parkside boys. This therefore appears to be another negative observation on the social relationships of Parkside boys; although the remarks on the relative length of essays perhaps apply here.

As mentioned above, for the two categories: old age happy/old age sad, Townsend girls have the highest percentage on the former and the lowest on the latter. Parkside boys have the lowest on the former and the highest on the latter. In general girls seem to think of old age as being sad less often than boys.

Other partner dies first: this category achieves a higher rate of incidence for girls over boys within the two school-groups. Nevertheless, Parkside boys score higher than Townsend girls. Also the fact that far fewer Parkside boys mention marriage at all gives the score an added significance. Actually 67% of those Parkside boys mentioning marriage mention the other partner dying first. The figures for all four subgroups on this basis are: TG=31%; TB=18%; PG=40%; and PB, as stated, 67%.

Mention of self dying: this is a relatively unfruitful category, except in the negative sense that very few of the children appear to envisage their own death. On the other hand the wording of the instructions for the test tends to exclude this possibility from the outset.

Excerpts from selected essays and some cross references

The essays chosen for comment are those which in some respect were, in the opinion of the research team, out of the ordinary run and of more interest than the majority. The interest arose from both, as it were, positive or negative aspects of the essay. From Townsend four girls and no boys were chosen, and from Parkside one girl and three boys.
Wendy (Townsend)

*I.Q. (at 11 years) = 101

*Discrepancy scores** on: 

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<tr>
<td>Reading 2</td>
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(A girl of average intelligence whose reading ability is above the level predicted, but who appears to be doing less well in arithmetic)

***Best Moment Category = Relief from anxiety and gift of a pet

***Ideal Person Category = Moral

(Actual Ideal Person, Cousin Helen in What Katy Did)

***Six most Wicked Deeds:

1. Harm to defenceless animals
2. Harm to defenceless children
3. Disliking the coloured people, we are all equal to God so we should be equal to each other
4. Killing
5. Stealing
6. Making fun out of deformed people

This essay was one of two (both by girls) which dealt with the Faustian theme of 'two souls in one body'. That is, wayward, headstrong, romantic urges versus calmness and acceptance of the everyday. In the end this girl gives up the film producer (having realised that getting to the top involves cheating and selfishness) and returns to her ordinary boyfriend. The essay finishes:

"I wonder what life with Donald (the film producer) would of been like. I wonder if I made a wise choice. I think so ..."

**A discrepancy score is, briefly, the difference between predicted score and actual score on a measure. A positive score indicates that the child has exceeded prediction, a negative score that he is achieving below prediction. A zero score indicates a performance in line with prediction. In the present case prediction was made on the basis of measured intelligence (Section 3)
"I always remember the evenings that I used to wander up and down the beach listening to the sea and even singing to myself. I just didn’t know how my life would be. It seems so strange, the way our lives are planned."

Linda (Townsend)

*I.Q. (at 11 years) = 99
*See Section 3, pp. 19/45

*Discrepancy scores on:

- WISC Vocabulary = 0
- Vernon Arithmetic/Maths = +3
- N.F.E.R. Secondary = -6
- Reading 2 = -6

(In contrast to the first girl, Linda is strong on arithmetic, but under-achieving on reading)

**Best Moment Category = Gift of a pet

**Ideal Person Category = Fashionable/Famous
(Actual Ideal Person, Dusty Springfield)

**Six most Wicked Deeds:

- (1) Harm or kill human beings
- (2) Harm animals or kill them
- (3) Cause fires to damage people's belongings on purpose
- (4) Rob young or old people
- (5) People to pry into other people's lives and blackmail them for it
- (6) Turn animals out to find their own homes

**See Sections 4:2, pp. 49/57
4:3, pp. 58/75
4:4, pp. 76/105

This was a strange essay. She is one of the few girls who do not marry, but lives alone with mother. At the beginning of the essay she says that she did not mind leaving school, because her favourite teacher was also leaving. The teacher tells the girl that she could write to her. Relatives of the girl tell her that the best days of her life are over. Some description of a career as a secretary follows. One night, when she is 56½ years old, she decides to write to the teacher. The remainder of the essay, which is strange both in the confused logic and sequence of events, and the inconsequential ending, follows.

"Some how my thoughts suddenly wandered back to Mrs. Carver
who said I could write to her. I had not written to her and I had had the letter for a week. By now she was about sixty-nine years old. So ... I sat down and wrote a letter to Mrs. Carver. She was a widow and had been a while she was at school when she was about twenty-five years old. By the time I had finished my letter it was getting on for eleven-o'clock and I was getting quite weary so I went to bed."

Pat (Townsend)

*I.Q. (at 11 years) = 74  *See Section 3, pp. 19/45

*Discrepancy scores on

WISC Vocabulary = 0
Vernon arithmetic/Maths = +4
N.F.E.R. Secondary = +3
Reading 2 = +3

**Best Moment Category = Gift of a pet

**Ideal Person Category = Moral
(Actual Ideal Person, myself)

**Six most Wicked Deeds

(1) Killing animals
(2) Killing people
(3) Taking things which do not belong to you
(4) Saying God's name in things which are not right
(5) Swearing
(6) Talking about people behind their backs

**See Sections 4:2, pp. 49/57
4:3, pp. 58/75
4:4, pp. 76/105

In this essay leaving school, career, marriage, children, children growing up and leaving home are all accomplished in 7 lines. (This, incidentally, is one of the girls who gets married, raises children, is left all alone etc. without once mentioning any kind of husband) The remaining three pages of the essay deal with the girl's paralysis of the legs in old age, of various people ministering to her, of arriving eventually in hospital, till finally:

"Then as the days went I started to get weaker and weaker and I lost all my use in both of my legs so the day came that I died and I had left a beautiful home. So I expect someone else would look after my home and keep it in a nice shape and tidy ". 
Christine (Townsend)

*I.Q. (at 11 years) = 105  *See Section 3, pp. 19/45

*Discrepancy scores on:

- WISC Vocabulary = +1
- Vernon Arithmetic/Maths = +2
- N.F.E.R. Secondary Reading 2 = +2

(going out with boy-friends, preparing for holidays, driving in a car)

**Best Moment Category = X

**Ideal Person Category = Moral
(Actual Ideal Person, myself)

**Six most Wicked Deeds:

(1) To make fun of someone's disability or deformity
(2) To cause harm to anyone physically
(3) To talk about someone maliciously behind their backs when they are in earshot
(4) To ill treat animals of all kinds is a common wickedness
(5) To be deliberately spiteful and hurtful

**See Sections 4:2, pp. 49/57
4:3, pp. 58/75
4:4, pp. 76/105

This is the other essay dealing with a basic conflict within the subject's personality, i.e. whether to be wild and irresponsible or whether to be moderate and ordinary. The quoted extracts speak for themselves.

"However my most wanted desire of childhood was to be a famous person an actress or a model. Through my early teens I pondered over these ambitions and realised that neither would ever come true. My mother told me that she had the same child-like fancies and nothing exciting ever happened to her. This made me feel utterly miserable...

....Although I am now an old woman with all my family grown up and left home I still dream at night of how my life would have been... My problem when I was young, I thought, was that I had two very different moods, one minute I longed to be really sophisticated the next I wanted desperately to be as wild and as free as an Indian with long black hair. There was no medium with me, I envied the nice quiet
homely girl of being so content and happy oblivious of the other side of life.

The mood I most often found myself in was the wild free life without a care or worry. People can think what they like of me. I never really had the chance to let myself go as I would have done had my best friend not left when I was fourteen. My conscience often told me that to want to be free with no cares, with no ties of home life to bring me back to reality; was a cowardly way of looking on life with this thought I retained myself and so prevented myself from doing the wildest of my emotions. I think everyone has their own dream which never comes true. Well, that was mine. However, I had had a good life and there's not one part of it I would change." (In the opening paragraphs of the essay the girl describes an uneventful courtship and marriage and the birth of three children)

The essay has a number of interesting features. In particular, perhaps, the feeling of genuine involvement in this problem as opposed to a conventional description at second-hand from some magazine. This is possibly seen in the deterioration of punctuation (not found in the early part of the essay) and the misspelling of the word 'emotions'.

It would also seem that what the girl is describing is the process which was implied to underlie the change from an F-choice to an M-choice in the analysis of the Best Moment scripts (Section 4:2). It is a change which perhaps passes relatively unnoticed by the many, but in some cases is resolved only with difficulty, or in others is never resolved completely at all. Hence, Jung would no doubt argue, our interest in the Faust legend, and the reason for its survival.

Townsend Boys

No essays from this group seemed of special interest.

Vivienne (Parkside girl)

*I.Q. (at 11 years) = 87

*Discrepancy scores on:

WISC Vocabulary = -1
Vernon Arithmetic/Maths = -3
N.F.E.R. Secondary = -3
Reading 2 = -5

*See Section 3, pp. 19/45
**Best Moment Category** = Travel and entertainment

**Ideal Person Category** = Moral

(Actual Ideal Person, myself)

**Six most Wicked Deeds:**

1. Ever do harm to any person such as murder
2. Ever steal anything from anyone
3. Ever do any harm to any animal
4. Ever tell a person you hate them
5. Ever say anything of a person's health, if the person involved didn't want you to.
6. Ever owe any money to anyone or any firm

This girl's essay, after stating the fact of leaving school and working in her father's sweet-shop, begins with her falling downstairs and breaking her leg. One year later she gets polio and loses the use of her legs for good, being confined to her wheelchair. However this does not stop her from getting her man (who is literally on the run clutching some stolen money, with the police chasing him through the park), having a baby and taking over her father's sweet-shop. (The father and mother are killed in a car-crash). The essay closes with the girl having been seriously ill and confined to her bed 'never able to get up again because of my very weak heart.'

'I was bedridden for four years and I am now just lying here waiting for my end with my son holding one hand and my husband holding my other hand.'

Robert (Parkside Boy)

*I.Q. (at 11 years) = 81* *See Section 3, pp. 19/45*

*Discrepancy scores on:*

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**Best Moment Category** = Travel and entertainment

**Ideal Person Category** = Fashionable and famous
**Six most Wicked Deeds:**

(1) Torture people
(2) Murdering people
(3) Having pets and do not look after them
(4) Shooting animals and birds
(5) Taking birds eggs
(6) Putting wild animals in zoos

The excerpts from this essay are largely self explanatory.

"I am eighty-three years of age, and I left school at the age of fifteen. I am living on a very small pension. One night I had a dream and thought to myself my working days are over, and I have only a few years of life left in me. I thought of the days I had enjoyed at school, and at work. Now I have been retired for many years I have been lonely and never felt so lonely before. Many of my old friends are dead and I think about the good times I had at work over and over again.

...My working days are soon over, how I longed to be back at work where I could be happy and have friends, but here I am all alone in my bungalow with no one to talk to. Then everything would go blank and I would be fast asleep. The next day I would be sat in a chair looking out of the window on to the streets where I might see an old friend go by and call him in to see how he was getting on. The days went on very slow but soon I would be at rest in peace."

This boy does not mention marriage. In at least his case the failure to mention it is certainly not due to inability to verbalise. (It was suggested earlier that the low figure of Parkside boys who mentioned marriage, 45%, might be partly due to shorter essays and poorer powers of verbalisation) It is of interest that he expresses his fears of loneliness at the fantasy level, i.e. in a dream, while in reality he sees himself as not too badly off - a friend can be persuaded to drop in occasionally. The power of the dream, however, may perhaps be seen not only in the fact that it takes up the greater part of the essay, but in the fact that while it stands out as a single dream, by the end of the essay it is a recurrent one (then everything would go blank etc.)

Richard (Parkside boy)

*I.Q. (at 11 years) = 64

*See Section 3, pp. 19/45
**Discrepancy scores on:**

- WISC Vocabulary = +3
- Vernon Arithmetic/Maths = -14
- N.F.E.R. Secondary Reading 2 = -1

**Best Moment Category** = Travel and entertainment

**Ideal Person Category**
- (actual Ideal Person, Vicar) = Moral

**Six most Wicked Deeds:**

1. Slarter someone
2. Murder
3. Electric chair
4. Hanging
5. Starving
6. Gassing chamber

---

This is the essay of the boy who was chosen as another boy's Ideal Person. This second boy is referred to in the essay as Arthur. The opening of the essay is surprisingly like that of Parkside boy 1.

"It is a Sunday afternoon and I am sitting in an old armchair and I am eighty nine and I am alone and I am not bothered about any more, and I am thinking about my school days they were so much fun I remember my good old school friend Arthur he was very good to me only I never see him now I do not no whether he is still alive he might be and I still go to the pictures by myself and I still go to football matches sometimes so I have got a lot to be thankful for and I do my shoping and I cook my own food and I prey to God for all the good things I have got and I like to listen to the birds and I allways remember when I was at school I asked a Girl out and she said no and I allways think about her, I hope she is still alive I wonder if she thinks about me I bet she doesn't but I am quite satisfied! I don't let it worry me as long as God keeps me alive for a few years. I do not mind."

Norman (Parkside boy)

* I.Q. (at 11 years) = 84
*Discrepancy scores on:  

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**Best Moment Category**
Blank script

**Ideal Person Category**
(Fashionable and famous  
Actual Ideal Person, Mr. Austin, Austin Motors)

**Six most Wicked Deeds:**

1. Murdering young children that cannot fight back
2. Kille dum animla
3. Shooting brides and animla
4. Setting to building on fire
5. Wreaking railway thing
6. Like putting thing on the lines

Whereas the two previous essays were interesting from the point of view of the loneliness expressed, this one is interesting from the 'haphazard sequence or rather the non-sequence of events. The 'errors' would not appear to be entirely ascribable to a mere inability to spell (though this is obviously part of the story).

"I am 80 year old I am write my life I still can remember when I was blow up Gas which stopped me from growing for seven whole year. When 14 I had part time job like it deliver to houses. Then I left school went out into the world and when school through I will be glady when I left but was hard working in the world. At 25 year I got marrid in one them office you know I cam into some money so I got racing and house I went racing most satday that a year my wife was killed in road crash I married and had children. They grow up and got illes which finish me."

**General Comments**

The two boys who produced the ferocious lists of Wicked Deeds quoted in Section 4:4 both wrote entirely normal and conventional essays, which described leaving school and getting a job, working hard, saving, marrying and raising children. This must serve as a caution to anyone attempting to evaluate personality or state of mental health from only one set of projective data. Clearly, different instruments call forth widely differing reactions and one is not in a position to say which is more typical or meaningful without supportive evidence from yet other sources.
It is of interest that four Townsend girls' essays and three Parkside boys' essays, as opposed to one Parkside girl's essay and no Townsend boys' essays struck the research team as being of unusual content, since it has been suggested elsewhere in Section 5 that Parkside boys and Townsend girls constitute somewhat deviant groups; the former in terms of superficial social contacts, that latter in respect of high maladjustment scores from mothers and teachers. The possible influence of a halo effect on the research team cannot, however, be overlooked. Being already convinced that Parkside boys and Townsend girls were in some sense deviant groups may have influenced the team to find more 'interest' in the essays of these children.

Further detailed information and comment on the eight children whose essays are quoted in this Section is given in Appendix A (Additional material for the basis of eight case studies.)
Section 4:6 Summary of the findings

There were in all four projective tasks (the Best Moment of My Life, My Ideal Person, 'Wicked Deeds' and Retrospective Essay: Looking Back on My Life) In general an objective, behavioural approach was adopted to the projective data, no prior hypothesis or orientation being involved. The material was categorised in each case on the basis of its revealed characteristics on inspection. From the work of earlier investigators it was, however, thought that any generalised patterns would tend to be masked by an overlay of purely local or individual variations, from which the former would not in the first instance be distinguishable.

'Best Moment' (4:2)

These scripts were sorted into categories which were in part produced by the scripts themselves and in part the result of suggestions by earlier workers. These were: travel and entertainment; achievement; gift of a pet or birth of a sibling; relief from anxiety; gift of an object; other mentions.

The category travel and entertainment is favoured by the duller children, agreeing in this with the findings of a similar study. However, a third study of a younger population had shown an association for brighter children. Parkside boys and girls figure twice as frequently as Townsend boys and girls in this category. Achievement is more favoured by boys than girls, but also by Parkside more than Townsend. Other studies had suggested a link between this category and intelligence, which is apparently not found here. Gift of a pet and birth of a sibling appear to be psychologically equivalent in some sense, especially for only children. Children choosing the gift of a pet as their Best Moment also judge cruelty to animals more severely in their lists of Wicked Deeds. In an earlier study more girls had shown relief from anxiety. No such association was demonstrated in this study, nor the reverse either. Instead there is a tendency for this category to be associated with Townsend. Gift of an object was chosen only by one or two children.

Ideal Person (4:3)

It was found that Ideal Person choices could be meaningfully sorted into one of two categories, Fashionable-Famous (F) and Moral (M). A few choices could not be so sorted and were categorised Unclassified
(U). An F-choice was where the Ideal Person was admired for worldly success. In the M-choice the Ideal Person is chosen for qualities of character or dedication. F-choices were found to predominate at 11 years of age, when such a choice is usual, and is found to associate significantly with scholastic attainment and over-achievement. At 15 years M-choices were found to predominate. The F-choice seems now to be an indication of arrested or late development and associates with poor levels of attainment. There appears to be a developmental sequence from F-choice to M-choice with increasing age. The F-choice is preceded in some cases by an M-choice, which superficially resembles a true M-choice, but is associated with very poor attainment.

A more generalised definition of F and M choices, showing that in the former case fantasy elements predominate while in the latter case reality elements are to the fore, enables not only several of the formerly unclassified group but also the findings of a number of other workers in this field to be included in this theoretical framework.

Lastly both a school and sex difference was observed. At 15 years Townsend predominates over Parkside, and girls over boys in the percentage of M-choices.

'Wicked Deeds' (4:4)

When the Wicked Deeds listed by this population were ranked in order of frequency, the four most popular at 11 years were: murder, physical cruelty; stealing and cruelty to animals; and at 15 years: murder, cruelty to animals, stealing and physical cruelty. There were, however, differences between the sexes considered separately and between three established ability groups (able, average and dull). Boys, for instance, have physical cruelty in second place at 15 years, and the percentage of boys with murder as first choice declines between 11 and 15 years, while for girls the incidence increases. The percentage of able children rating murder as the most wicked deed also declines in this period.

There are further variations, some statistically significant, between first thought and first choice of wicked deed. On reflection murder is upgraded by both girls and boys. Cruelty to animals, which is the second most frequent thought for boys, is downgraded on reflection, while with girls the incidence of this deed as first thought as opposed to first choice remains constant.
The number of Wicked Deeds given increases between 11 and 15 years of age. Girls tend to produce longer lists than boys, and more intelligent children longer lists than dull children; except that for the very bright children greater powers of synthesis apparently operate to reduce the total.

As with other items of the projective data obtained in this study, it was noted that what the bright child does at 11, the dull child does at 15. The brighter child, for instance, mentions lying as a wicked deed at 11 years but no longer uses it at 15 years. The duller child does not mention it at 11 but mentions it at 15 years. The very dull child does not include it on either occasion.

This is found to be the case for a number of features of the wicked deed scripts. The conclusion is that the children are passing at different rates through a series of developmental stages which are somehow reflected in the content and other aspects of the scripts. When the attainment of discrepancy scores of those children who (1) mention lying at 11 (2) mention lying for the first time at 15 and (3) do not mention lying at all are inspected, it is found that the first group is extremely successful academically, the second group is reasonably successful, while the third group makes the poorest showing of all. It was established that the children in the more advanced stage, with the better academic performance are not necessarily the most intelligent in terms of measured I.Q. There does, on the other hand, tend to be an association between high I.Q. and relatively early entry into a stage.

This finding that changes in personality variables of a maturational nature appear to be linked with level of attainment, i.e. cognitive or intellectual variables, in the normal child, could have considerable repercussions for educational psychology.

The Retrospective Essay (4:5)

The retrospective essays were analysed in respect of a number of themes. These included mention of marriage, educational plans envisaged for own children, achievement motive, view of old age and a number of others. It was noted that in general boys' essays were shorter than girls' and Parkside boys in particular tended to produce short essays.

The incidence of achievement shows marked differences for boys
and girls. Townsend girls, however, have a much higher incidence than Parkside girls. Boys are more adventurous than girls in terms of settling in other towns and countries. Girls mention far more other people in their essays than the boys. Similarly marriage has a far higher incidence for the former. Of interest is the very low incidence of marriage for Parkside boys. This group also has the highest incidence for old age as unhappy, lonely or dogged by ill-health. More girls mention the death of the marriage partner than boys; although if the figures are re-calculated in terms only of those mentioning marriage, the incidence for Parkside boys is by far the highest.

Extracts are given from essays appearing to merit closer attention, together with some interpretive comment. Eight children are concerned, namely 4 Townsend girls, 1 Parkside girl and 3 Parkside boys.

General

It appears from the various types of projective material examined that general personality development and maturation play an important role in success or non-success in academic subjects, to some extent independently of measured intelligence. Children appear to pass through distinguishable stages in emotional development which are reflected in various ways in projective responses. An arrest within or delayed entry into a stage appears to preclude satisfactory scholastic performance. Backwardness in school subjects might therefore be profitably dealt with by direct reference to personality structure and personality development. If further studies support this view, projective tasks such as used here might come to serve as (additional) diagnostic tools for the detection of the immature personality.

References (Section 4)


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My Ideal Person - a follow-up of an earlier study (in preparation)

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Chosen Ideal Person, personality development and progress in school subjects. Journal of Human Development (in the press)

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WEST, V.V.H. (1958)
SECTION 5

THE QUESTIONNAIRES
Section 5: An Analysis of the Data in Terms of Five Themes

Introduction

The four instruments considered in this section are:

1. Children's Questionnaire (completed by the child with help and supervision)

2. Structured Individual Interview (face to face discussion with the child)

3. Confidential School Report (completed by the Headmaster or class teacher for each pupil)

4. Parental Questionnaire* (sent by post to the mother of the child)

Full copies of these instruments are given in Appendix B (slight modifications in the wording of the Individual Interview were necessary for those pupils who had already left school and these changes are indicated). The instruments will throughout be referred to by these respective abbreviations: Children's Questionnaire = CQ; Individual Interview = II; Confidential School Report = CSR; and Parental Questionnaire = PQ.

The completed instruments faced the research team with a very large amount of material requiring codification as a first step and analysis as a second, preferably by some process of quantification. In the first stage the answers to the various questions were recorded on mastersheets in an abbreviated or coded form. A simple Yes/No question, such as question 3 of the PQ, would be recorded Y (=Yes), N (=No), DK (=Don't Know) or NR (=No Reply). Questions like 1 and 2 of the CSR, requiring an answer on a five-point scale (Very much above average; Above average; Average; Below average; Very much below average) were coded by the numbers 1 to 5, the number 1 representing the most favourable estimate. An item on the other hand like question 6 of the CSR, where the teacher was asked to tick one or more of a series of descriptions lettered a to o, was dealt with by entering the appropriate letters on the master sheet, e.g. f, l, n.

* Only two parents ultimately failed to complete the questionnaire. Other initially reluctant parents responded to follow-up letters or a home visit by a member of the research team.
At this stage no attempt was made to interpret or evaluate the actual replies. (Unless the assumption that the series: Very good; Good; Average; Poor; Very poor, constitutes a five-point scale with equal intervals between points on the scale is considered to be such)

However, rather than record the data simply in an amorphous mass even at this stage, replies were grouped as providing information about five themes or headings, namely: (1) Success in school (2) Attitude to school (3) Ambition in parent and child (4) Social relations with peers (5) Emotional profile. There is no suggestion that these headings are either exhaustive or mutually exclusive. Several questions appeared under more than one heading. A number of questions failed to relate to any of the themes and these are dealt with separately in Section 5:2.

Further breakdowns of the data

Clearly, the data could not be presented individually for each individual child and the question of meaningfully dividing the population into groups was considered. Since, as far as possible, the four school-sex groups of the original junior study have been used as the basic frame of reference throughout the report, it was decided to retain these. However, in general it is probably more productive to establish groupings based on hypotheses (to be proved or disproved) rather than to accept always given or arbitrary groupings. Therefore in addition to the four school-sex groups, all girls/all boys and all Townsend/all Parkside, three ability groups were set up.

This last proposal is not in itself new as far as the present report is concerned. However, whereas previously ability groups were established on the basis of measured I.Q., on this occasion they were based on teacher's estimate of ability as given in the CSR. This has the advantage of producing a picture of the pupil judged in relation to his peers (in terms of his class-group or of his school as a whole) instead of in relation to some national average. To underline this point, when the children are divided into groups on the basis of measured I.Q. the top group is always predominantly Townsend and the bottom group predominantly Parkside. When a division into three groups is made on the basis of teacher's estimate of ability, however, the top group is found to consist predominantly of Parkside children (64%)
There appear to be several points in favour of considering children's ability in relation to their immediate circle and not in terms of a national average or of some other population. In general the well-being that tends to go with social or academic success arises from the approval and admiration of the reference group rather than from the absolute value of the success. It is therefore likely to be of more moment to know a child's position within his own peer group than to know his measured I.Q. Similarly, it was suspected that the 'successful' Parkside child would tend to show the same associated behaviours as the 'successful' Townsend child, regardless of I.Q. differences, and that the addition of more Parkside children to the top group would, far from blurring any 'success-pattern' of this group, probably facilitate its discovery. In the event this prediction appeared to be borne out.

The formation of three ability groups

On the CSR teachers were asked to rate children on a five-point scale, i.e. Very much above average; Above average; Average; Below average; and Very much below average, in six academic or cognitive areas, namely: Common sense; General knowledge; Reading; Spelling; Written English; Mathematics. The five-point scale was assumed to consist of equal intervals between points, and the numbers 1 to 5 were now assigned as scores, starting from Very much above average = 1. Thus a child can be said to have a 'score' (from 1 to 5) on each item. If these scores out of 5 are then summated and averaged (by dividing by 6) a 'mean academic score' is obtained.

The range of possible scores (obviously again 1 to 5) was divided into three sections so as to group the population roughly into: top 25%; middle 50%; and bottom 25%. Group I is the most able group as estimated by teachers, Group III the least able. Group II comprises the children of average ability. Exact details are shown below.

Group I  (Mean academic score range 1 - 2.4)  N = 22
Group II (Mean academic score range 2.5 - 3.4) N = 41
Group III (Mean academic score range 3.5 - 5.0) N = 18

The percentages of Townsend/Parkside and girls/boys for each group are shown in Table 29, and the numbers and percentages of the four school-sex groups in Table 30.
Table 29

<table>
<thead>
<tr>
<th>Group</th>
<th>Townsend</th>
<th>Parkside</th>
<th>Girls</th>
<th>Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I</td>
<td>36%</td>
<td>64%</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>Group II</td>
<td>46%</td>
<td>54%</td>
<td>59%</td>
<td>41%</td>
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<tr>
<td>Group III</td>
<td>56%</td>
<td>44%</td>
<td>50%</td>
<td>50%</td>
</tr>
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</table>

Table 30

<table>
<thead>
<tr>
<th></th>
<th>TG N %</th>
<th>TP N %</th>
<th>PG N %</th>
<th>PB N %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I (N=22)</td>
<td>3 14</td>
<td>5 23</td>
<td>10 45</td>
<td>4 18</td>
</tr>
<tr>
<td>Group II (N=41)</td>
<td>11 27</td>
<td>8 20</td>
<td>13 32</td>
<td>9 22</td>
</tr>
<tr>
<td>Group III (N=18)</td>
<td>8 44</td>
<td>2 11</td>
<td>1 6</td>
<td>7 39</td>
</tr>
</tbody>
</table>

The quantification and presentation of the data

The data is presented in the form of five tables based on the five themes listed above: (1) Success in school (Table 31) (2) Attitude to school (Table 32) (3) Ambition in parent and child (Table 33) (4) Social relations with peers (Table 34) and (5) Emotional profile (Table 35). To emphasise that the tables are not, however, in any sense discontinuous the column numbers of these five tables are continuous from 1 to 54.

Just as information contained in one column may appear in the same or slightly modified form in another of the tables because of its equal relevance to both themes, so the figures in a given column may be based on the answers to more than one question. Information about clubs and societies was given twice, for instance, by the children themselves, on the CQ and II, and once by the teacher on the CSR.

Most of the figures given in the table are group means. On some occasions percentage incidences seemed more appropriate and these columns are headed by the percent symbol. On yet other occasions it was felt that figures arrived at after quantification were in themselves misleading, in that they implied, for instance, that one group was several times as good as another; whereas in fact in the particular circumstances no conclusions about the size of intervals are possible. In these cases, a rank order only of the groups concerned is given, since this represents in any case the one permissible conclusion arising from the quantification.
Below follows a description of the process by which the figures in each column were produced, together with comment on and interpretation of these figures where appropriate. The source questions producing the initial information are indicated by footnotes.

Table 31: Success in School

Column 1. Mean Academic Score*

The computation of the mean academic score has been described above in connection with the formation of the three ability groups. It represents a mean rating by the teacher on a five-point scale (1=Very much above average; 2=Above average; 3=Average; 4=Below average; 5=Very much below average) in six respects, namely: Common sense; General knowledge; Reading; Spelling; Written English; Mathematics.

Regarding the school-sex groups it is of considerable interest that T-school boys receive a higher mean academic score than T-girls, while the reverse is the case in the progressive school. This is exactly in line with the relative positions established on the standardised attainment tests. The suggestion is therefore that the teachers' judgments (even though several different teachers in different schools are involved) have a high degree of accuracy. This result is noteworthy in that subjective judgments are usually considered to be unreliable; and encouraging in respect of the value of other information contained in the questionnaires.

When combined into all-school all-boy/girl comparisons the differences noted cancel out to produce similar all-school, all boy/girl results.

Column 2. Mean Non-academic Score**

The computation of the mean non-academic score was similar to that of the mean academic score. Teachers were again asked to make a

*CSR, question 1.
**CSR, question 2.
Table 31

SUCCESS IN SCHOOL

T-School = Townsend
P-School = Parkside

<table>
<thead>
<tr>
<th>Column Reference (R.O. = only rank order given)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8**</th>
</tr>
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<tbody>
<tr>
<td>*Group 1 (N=22)</td>
<td>2.0</td>
<td>2.8</td>
<td>2.5</td>
<td>59</td>
<td></td>
<td>105</td>
<td>10.2</td>
<td>10</td>
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<tr>
<td>*Group 11 (N=41)</td>
<td>3.0</td>
<td>3.1</td>
<td>2.9</td>
<td>15</td>
<td>15</td>
<td>96</td>
<td>10.5</td>
<td>8</td>
</tr>
<tr>
<td>*Group 111 (N=18)</td>
<td>4.0</td>
<td>3.6</td>
<td>3.0</td>
<td>83</td>
<td>-</td>
<td>87</td>
<td>11.6</td>
<td>7</td>
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<tr>
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<td>3.3</td>
<td>2.8</td>
<td>41</td>
<td>14</td>
<td>100</td>
<td>11.4</td>
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<tr>
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<td>2.9</td>
<td>20</td>
<td>40</td>
<td>98</td>
<td>12.8</td>
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<tr>
<td>P-Girls (N=24)</td>
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<td>2.8</td>
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<td>21</td>
<td>96</td>
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<td>91</td>
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<td>2.7</td>
<td>24</td>
<td>17</td>
<td>98</td>
<td>12.1</td>
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<tr>
<td>All Boys (N=35)</td>
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<td>3.3</td>
<td>3.0</td>
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<td>31</td>
<td>94</td>
<td>12.3</td>
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<tr>
<td>All T (N=37)</td>
<td>3.0</td>
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<td>24</td>
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<td>11.9</td>
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<td>All P (N=44)</td>
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<td>3.1</td>
<td>2.8</td>
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<td>23</td>
<td>94</td>
<td>12.2</td>
<td>7</td>
</tr>
</tbody>
</table>

*Based on Mean Academic Score (See adjacent key) ** Taken to the nearest whole number.

Key to Group Academic Ranges and Cols. 1, 2 and 3
1 = very much above average
2 = above average
3 = average
4 = below average
5 = very much below average

Group 1 Academic range 1 - 2.4
Group 11 " 2.5 - 3.4
Group 111 " 3.5 - 5.0
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<th>Column Reference (R.O. = rank order)</th>
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<td>+0.9</td>
<td>+3.5</td>
<td>+1.7</td>
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<td>56</td>
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<tr>
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<td>-0.4</td>
<td>-4.1</td>
<td>-2.1</td>
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<td>6</td>
<td>0.6</td>
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<td><strong>T-Girls (N=22)</strong></td>
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</table>

**Taken to the nearest whole number

*** Rank Order 1 = Least Difficulty
(Ranks by sections)
five-point rating but this time in five non-academic areas: Games and P.E.; Practical subjects; Art; Music; Drama. The mean rating, as before, is the result of dividing the total 'score' by the number of ratings (5).

Whereas in respect of the mean academic rating the Groups were placed in descending order of merit simply by construction - since the basis for being in Group I was a high mean academic score - there is no such necessity in the case of the mean academic score, which is constructionally independent of the three ability groups. Nevertheless, the descending order of achievement in the non-academic areas also is again from Group I through to Group III. So that apparently the brighter child academically is also the more able child at sport and the arts. This argues against 'compensation' theories which suggest that an intellectually not very bright child will excel at something else.

There is of course the possibility of a halo-effect here. It is well-known that if one regards a person favourably or unfavourably in one respect (e.g. mathematics) one will tend similarly to regard him favourably or unfavourably in all respects (e.g. at sport).

As with mean academic score, T-boys achieve a higher rating than T-girls, and P-girls higher rating than P-boys, providing further support for the position that bright children academically tend also to do better all-round. Again halo-effect may account partly for the trend of the results.

Column 3. Parents' Estimate of Academic Ability*

Parents (i.e. the mothers) were asked to rate the child on a five-point scale: to state whether the child was (1) very slow for his/her age (2) slow (3) average (4) fairly quick (5) very quick for his age.

Once again the assumption was made that this question represented a scale having equal intervals and a score of 1 was given to a child ticked on statement (5), a score of 2 to a child ticked on statement (4), and so on. Thus a score of 1 denotes very quick, a score of 5 very slow.

The ability group means, as far as rank order is concerned, are in line with the teacher's academic and non-academic group mean scores.

* PQ, question 9
It is noteworthy, however, that the parents of the brighter children underrate the children in comparison with the teacher, whereas the parents of the duller children over-rate the children in comparison with the teacher.

There is a slight tendency for both the Townsend and the Parkside parents to rate boys lower than girls. This may be a reflection of the fact that parents tend to be more ambitious for their sons, with the result that their achievement is always to some extent unsatisfying.

Columns 4 and 5. Percentage of parents overrating and underrating the children as compared with teacher's assessment*

The parent's estimate of the children's academic ability was compared with that of the teacher. The comparison seemed permissible in that the ratings of both parents and teachers were on similar five-point scales.

59% of Group I parents underestimated their children's ability in this comparison and 83% of Group III overestimated their children's ability. These figures could reflect on the one hand the parent's lesser skill in judging ability as compared with that of a trained teacher. However, if this were the full story of this 'regression to the mean', one would expect roughly equal amounts of over- and underestimating.

From the divergent percentages (59% and 83%) in the two categories it would appear that the parents of the duller children are consciously or unconsciously enhancing or compensating for the actual ability of their children. This is not hard to understand. It is by no means so easy to understand why parents should underestimate their child (assuming that not all of the 59% is due to ineptitude in judging) unless it is due to disillusion as a result of the child not finding a grammar school place.

Coming to the school-sex groups we find parents overestimating T-girls on the one hand and P-boys on the other. The most underrated group is T-boys. These differences are not readily accounted for. Possibly socio-economic differences are responsible for the reversal.

* CSR, question 1 and PQ, question 9.
Columns 6 and 7. Mean Cornwell I.Q. and s.d. (at 11 years)*

The mean I.Q.'s of the three ability groups are in line with expectation, Group I having the highest mean I.Q. These results must be regarded as giving further support to the reliability of teachers' estimates of ability, on which the three ability groupings are based. This is perhaps all the more noteworthy since the quotients were obtained five years ago.

The mean I.Q.'s of the school-sex groups have been already discussed in Section 3 of this report.

Columns 8, 9 and 10. Mean WISC Vocabulary, Vernon Arithmetic, N.F.E.R. Secondary Reading 2 scores**

In each case the means of the three ability groups are in line with expectation. Group I has the highest mean, Group III the lowest. Once again this evidence supports the reliability of teacher estimates.

The mean scores of the school-sex groups have been discussed at length in Section 3.


It will be noted that Group I has in each case a positive mean discrepancy score, Group II a negative discrepancy score and Group III a still larger negative discrepancy.

The implications of these results are of the greatest importance. It will be recalled that the difference (D) between predicted score (=\(Y\)) and actual score (=\(\hat{Y}\)) has a zero correlation with the initial predictor (X). There is no statistical relationship between D and X. Since in the present case the X scores used were I.Q.s, the difference or discrepancy scores are independent of level of intelligence. In other words Group III does not achieve negative D scores because of its low intelligence level. A child achieves a negative discrepancy score when it is under-achieving relative to other children of the same intelligence.

* Cornwell Intelligence Test (Section 3)
** Section 3.
There are thus no more grounds for expecting negative discrepancies in the low intelligence groups than there are for expecting them in the high intelligence groups. Why, then, does the initially bright child perform even better with the passage of time, while the duller child drops further and further below his potential?

For an explanation of the findings one must therefore look for 'negative incentives' operating to the disadvantage of Groups II and, more particularly, III. There is a possibility that these are of socio-economic or family nature (Further information in this direction is available in later tables) It is likely that school treatment also plays a part, even if only a reinforcing part, in the process. If during their school career bright children apparently get brighter and dull children duller, it may be because there is in many schools (such as, perhaps, Townsend) a preferment of, as well as a better standard of teaching for the 'A' child; and the reverse for the 'C' child. A dog given a bad name, as folk-lore suggests, tends to end up by deserving it.

It is regrettable that the grammar school children of the Townsend and Parkside populations could not be studied. If it could be shown that 'C' stream grammar school children under-achieve in the sense of obtaining negative discrepancy scores, while 'A' stream secondary modern children over-achieve - even though the former, of course, are probably in an absolute sense a brighter group than the latter (i.e. having a higher I.Q.) it would tend to reinforce the argument that achievement is as much if not even more a matter of the child's position within the reference group and the attitudes (abilities?) of the teachers concerned than it is of the degree of intelligence of the child.

Column 14. Percentage of children taking public exams.*

The examinations in question are principally the Certificate of Secondary Education examination, the Union of Educational Institutes examination and, for a few children, 'O' level of the G.C.E.

As might be expected, the percentage of children taking exams declines sharply from Group I through to Group III. The proportion of boys in each school group preparing for examination is twice that of girls. This is probably a function of greater career-orientation among the boys as well as among their parents. It also perhaps accounts for the tendency of P-boys in particular to make more progress in academic subjects

* CSR, question 8.
than P-girls at this time. There is also a marked difference between Parkside and Townsend, a higher proportion of the Townsend population taking exams. This is, of course, the relatively brighter population from the generally better homes.

Column 15. Percentage of children having won prizes, certificates or awards during their school career

Again, as one would predict, the percentage of children winning prizes or other awards decreases markedly from Group I to Group III.

Not too much weight can be given to the differences between sex-groups and school-groups, since clearly the number of prizes one can win is partly a function of the number of prizes available - about which we have no information. However, it is worth noting that while about twice as many boys as girls were preparing for examinations, the position is practically reversed both for winning prizes and for holding positions of responsibility (the next category) where girls exceed boys.

Column 16. Mean number of positions of responsibility held

For the first time Group II achieves a higher mean score than Group I. The difference, however, is slight. (1.0 to 0.9)

Since, as with prizes, the chances of having a position of responsibility depend on the number of positions available, again not too much weight can be given to school-sex differences. When analysing the questionnaires it was clear that some classes tended to evolve more (minor) positions of responsibility than others.

All positions of responsibility, however minor, were included - such as 'milk-monitor' and 'in charge of pets'. Perhaps therefore the figures are less meaningful than they might be.

---

Q, questions 5 and 6.

PQ, question 15.
Column 17. Parent's estimate of difficulties with school work*

The parents were asked whether the child had ever had any difficulties with school work, to which the possible answers were: Never; from time to time; always; don't know.

The following arbitrary values were assigned: Never = 1; From time to time = 2; Always = 3. The 'don't know' answers presented a problem. It was felt that while in some cases parental ignorance was genuine, this answer might well be used as a cover (in much the same way as the parents of dull children described their children as average) Therefore it was allotted a mid-weighting between 'never' and 'from time to time' with a score of 1.5. This step should not distort the real picture unduly. However, because of the entirely arbitrary nature of the scoring the actual values obtained are not given in the table, merely the rank orders of the various groups. (However, the actual mean scores obtained for the ability groups were: Group I = 1.6; Group II = 1.8; Group III = 2.0).

The rank orders of the ability groups are in the order expected, with Group I reported as having least difficulties. In respect of the school-sex groups both groups of boys are reported as having more difficulties than both groups of girls. This may be due simply to parents watching boys' progress with more anxiety, in that the question of a future career is involved, or it may mean that a greater proportion of the boys are in fact more backward or less willing to study.

Table 32. Attitude to School

Column 18. Classroom Behaviour**

Teachers were asked to mark any of 11 items (a to k) which most accurately described the pupil's behaviour in class. More than one item could be used.

Two of these items (a and h) constituted normal behaviour

* PQ, question 15
** CSR: In Classroom, question 5
Table 32  
Attitude to School  
T-school = Townsend  
P-school = Parkside  

<table>
<thead>
<tr>
<th>Column Reference</th>
<th>18**</th>
<th>19***</th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>23</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>(R.O. = rank order)</td>
<td>R.O.</td>
<td>R.O.</td>
<td>R.O.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Group I (N=22)  
1  
1  
1  
1.5  
5  
27  
59

*Group II (N=41)  
2  
2  
3  
2.0  
7  
12  
54

*Group III (N=18)  
3  
3  
2  
2.2  
11  
6  
67

T-S Girls (N=22)  
4  
4  
3  
2.3  
9  
18  
64

T-S Boys (N=15)  
2  
2  
1.5  
1.8  
7  
13  
47

P-S Girls (N=24)  
1  
1  
1.5  
2.0  
8  
13  
67

P-S Boys (N=20)  
3  
3  
4  
1.7  
5  
15  
50

All Girls (N=46)  
1.5  
2  
1.5  
2.1  
9  
15  
65

All Boys (N=35)  
1.5  
1  
1.5  
1.7  
6  
14  
49

All T-S (N=37)  
2  
2  
1.5  
2.1  
8  
16  
57

All P-S (N=44)  
1  
1  
1.5  
1.8  
7  
14  
59

*See footnote Table 31, p. 132

** Rank 1 = least maladjustment

*** Rank 1 = least psychological distance from teacher

§ Rank 1 = most positive attitude (Ranks always by sections)

§§ 1 = Very good attendance
Table 32 conti.

<table>
<thead>
<tr>
<th>Column Reference (R.O. = rank order)</th>
<th>1 = Yes</th>
<th>2 = Sometimes</th>
<th>3 = No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 (N=22)</td>
<td>41</td>
<td>1.7</td>
<td>64</td>
</tr>
<tr>
<td>Group 11 (N=41)</td>
<td>46</td>
<td>1.9</td>
<td>20</td>
</tr>
<tr>
<td>Group 111 (N=18)</td>
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<td>1.9</td>
<td>11</td>
</tr>
<tr>
<td>T-Girls (N=22)</td>
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<td>1.8</td>
<td>41</td>
</tr>
<tr>
<td>T-Boys (N=15)</td>
<td>53</td>
<td>1.9</td>
<td>47</td>
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<tr>
<td>P-Girls (N=24)</td>
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<td>1.8</td>
<td>13</td>
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<tr>
<td>P-Boys (N=20)</td>
<td>50</td>
<td>1.9</td>
<td>25</td>
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<tr>
<td>All Girls (N=46)</td>
<td>35</td>
<td>1.8</td>
<td>26</td>
</tr>
<tr>
<td>All Boys (N=35)</td>
<td>51</td>
<td>1.9</td>
<td>34</td>
</tr>
<tr>
<td>All T (N=37)</td>
<td>43</td>
<td>1.8</td>
<td>43</td>
</tr>
<tr>
<td>All P (N=44)</td>
<td>41</td>
<td>1.8</td>
<td>18</td>
</tr>
</tbody>
</table>

Note: R.O. = rank order
Column 17. Parent's estimate of difficulties with school work. *

The parents were asked whether the child had ever had any difficulties with school work, to which the possible answers were: Never; from time to time; always; don't know.

The following arbitrary values were assigned: Never = 1; From time to time = 2; Always = 3. The 'don't know' answers presented a problem. It was felt that while in some cases parental ignorance was genuine, this answer might well be used as a cover (in much the same way as the parents of dull children described their children as average). Therefore it was allotted a mid-weighting between 'never' and 'from time to time', with a score of 1.5. This step should not distort the real picture unduly. However, because of the entirely arbitrary nature of the scoring the actual values obtained are not given in the table, merely the rank orders of the various groups. However, the actual mean scores obtained for the ability groups were: Group I = 1.6; Group II = 1.8; Group III = 2.0.

The rank orders of the ability groups are in the order expected, with Group I reported as having least difficulties. In respect of the school-sex groups both groups of boys are reported as having more difficulties than both groups of girls. This may be due simply to parents watching boys' progress with more anxiety, in that the question of a future career is involved, or it may mean that a greater proportion of the boys are in fact more backward or less willing to study.

Table 32. Attitude to School

Column 18. Classroom behaviour. **

Teachers were asked to mark any of 11 items (a to k) which most accurately described the pupil's behaviour in class. More than one item could be used.

Two of these items (a and h) constituted normal behaviour while the remainder tend to indicate elements of undesirable or non-

* PQ, question 15
** CSR, In Classroom, question 5
conformist behaviour. It was arbitrarily decided to award a score of 1 to any child having a or h or both, and a score of 2 for each of any of the other items, this to be cumulative where more than one of the 'deviant' behaviours was mentioned. This procedure was simply designed to sort the sheep from the goats, and further, the mild goats from the wild goats.

Since the actual scores so obtained have little meaning except in the crudest terms, rank orders only are reported in the Table. (However, the actual mean scores for the three ability groups were: Group I = 2.1; Group II = 2.8; Group III = 3.7. High score indicates undesirable behaviour) Group I shows least undesirable class-room behaviour, Group III most. Possibly halo effect is at work here, regardless of what may in addition be the real position. The brighter boys may be seen as better behaved by the teacher than are the duller boys, even when they are not.

F-girls are judged to be least 'maladjusted' in class and T-girls most 'maladjusted' of the four school-sex groups. While it must always be borne in mind that the reporting is being done by different teachers, when two same-sex groups appear at opposite extreme ends of a scale one may suspect a causal factor.

Column 19. Approaching teacher*

Teachers were asked to mark one or more of five items (a to e), each describing a more or less forthcoming attitude to the teacher by the pupil. Two of these can be regarded as normal, the other three as indicating some degree of withdrawal. No teacher used more than one of the five items for any one pupil.

In considering the possibilities for quantification it was decided that items could be ranked in terms of the psychological distance from the teacher. A score of 1 was given to the item representing least distance and of 4 to the one representing most distance from the teacher. The values of the items were a = 1; e = 2; be = 3; d = 4.

Again, as these intervals are arbitrary, it was decided to

* CSR, question 5.
report only the final rank orders of the means. (The actual means of the three ability groups were: Group I = 2.1; Group II = 2.2; Group III = 2.3. High score means withdrawal from teacher) Group I has least psychological distance from teacher, Group III most. The groups, however, appear to differ minimally in this instance.

P-girls are seen as having least distance from teacher, T-girls most. This is precisely the order obtained on the question Classroom Behaviour (Column 18). In a sense this is the reverse side of the same coin. The more non-conforming or maladjusted child is likely to be more reluctant to seek contact with the teacher, and will of course be perceived by the teacher as being at a greater distance.

Column 20. Attitude to Schoolwork*

Teachers were asked to mark one or more of five items (a to e), indicating the pupil's attitude to school work. In some cases more than one item was marked. The arbitrary quantifying system devised was from positive through neutral to negative. Items a, b and c showed a positive attitude to the work and were scored 2 points each; d scored 1 point; and e (negative attitude) scored zero points. If more than one positive item was ticked only one was scored. If the neutral item and one other was ticked, only the neutral item was counted.

The Table shows only rank orders of the final means, because the size of intervals has little meaning. (Actual mean scores of the three ability groups were: Group I = 1.4; Group II = 0.9; Group III = 1.1. High score means a positive attitude.)

The usual rank order of ability groups is broken here, with group II achieving rank order 3. In the school-sex groups T-girls are in third rank place instead of, as in columns 18 and 19, fourth place. P-girls retain rank order one, sharing it however with T-boys.

Column 21. School Attendance**

Teachers were asked to record children's attendance on a five-point scale: Very good; Good; Average; Irregular; Very irregular.

* CSR: Attitude to School, question 5.
** CSR, question 7 (i)
These were scored 1=Very good down to 5=Very irregular. On this occasion actual averages are shown in the Table as they were felt in themselves to constitute a meaningful 'score'. A high score signifies poor attendance.

The attendance pattern of the three groups is as expected, with Group I having the best and Group III the worst attendance record.

In view of their rather poor academic achievements it is unexpected that P-boys have the best attendance record of the sex-groups. Both groups of boys have a better attendance record than both groups of girls. This probably reflects the fact that girls are more frequently kept at home to look after the family in cases of illness or confinement.

Column 22. Percentage of Long Absences.*

Teachers were asked to state whether a pupil had had any prolonged absences and to state reasons for them. For the purposes of the analysis only the Yes/No aspect of the matter was considered.

The percentage of children having long absences in each group was calculated. This increases from Group I through to Group III, the latter showing twice as great a percentage as the former. Both groups of girls have a higher percentage of long absences than both groups of boys, probably partly for the same reasons suggested for the immediately preceding category.

Column 23. Membership of School Societies**

From the three sources indicated details of school society memberships were collected. Originally it had been planned to allow every separate membership to count, i.e. more than one membership for some children. However, since some children belonged to as many as 7 and 10 school societies it was felt desirable to minimise the effect of the compulsive joiner. Hence, the number of children was calculated who belonged to one or more school societies (as opposed to those who belonged to none).

Percentage membership of school societies decreases from Group I through to Group III. More of both groups of girls belong to societies

* CSR, question 7 (ii) ** CQ, question 12
CSR, question 3
II, Leisure: question 4
than of both groups of boys. T-girls are the most active joiners, P-boys the least. In part, of course, the number of societies joined will be a function of the number of societies available for joining, which will differ from school to school.

Columns 24 and 25. Percentage of children who would like to re-organise schools and percentage who were satisfied with existing schools.*

The children were asked whether they would want to change anything about schools if they were Minister of Education. The percentages of those who suggested changes and those who did not were calculated.

Group III were apparently the most dissatisfied (constructive?), Group I next most dissatisfied and Group II least dissatisfied. Both groups of girls were more dissatisfied than both groups of boys. There was little difference between the two schools as a whole, which is somewhat unexpected since girls tend to be more conforming and accepting than boys.

Column 26. How do you like school?**

There was no standard reply to this question. However, answers were rated on the basis of those which amounted to a yes; those which implied sometimes or in some ways; and those which were a fairly clear negative. These were scored 1, 2 and 3 respectively, a high score indicating a dislike of school.

Since the actual means obtained were felt to have some meaning, these are given in the Table. While Group I has the most favourable attitude, Groups II and III are only very slightly less favourable. Differences between school-sex groups are also negligible.

Column 27. Percentage staying on after age of 15 years***

Group percentages were calculated of those staying on after 15. Group I is the most committed with a very high percentage of 64. Group II in second place is well down in enthusiasm for the benefits of continued education with only 20 percent. A mere 11 percent of Group III will stay on beyond the compulsory age. In each school more boys stay after

* II: School, question 12.
** II: School, question 6.
*** II: School, question 1.
15 than the girls. However, this difference is slight in respect of T-girls but quite marked in the case of P-girls. This is one of the few occasions where a difference of attitude (as opposed to a difference of attainment scores or I.Q.) shows up clearly in the all-Townsend/all Parkside comparison. This attitude moreover cuts across the sex-differences or school-sex reversals which otherwise usually predominate. However, it might be argued that these figures reflect the attitudes of the parents as much as or more so than those of the children (see, nevertheless, Column 35), since in the previous column (26) in answer to the question 'how do you like school?' no difference between T-school and P-school responses could be demonstrated, and only very slight differences between any groups.

Columns 28 and 29. Approval and disapproval of the principle of staying on after 15 years

In this question children were asked to give their views on the principle of staying on after 15. Most of the children made it clear that they did not intend their answers to apply to themselves, i.e. they stated that while they themselves did not wish to stay on, they felt it was alright for those who did. A few stated conversely that they approved of stopping on for themselves, but did not feel it should be forced on those who did not wish it.

A majority of the replies (60%) were judged as constituting a definite approval or definite disapproval of the principle and the percentages of these were calculated. As one would have predicted more of Group I than Group II, and more of Group II than Group III approve of the principle, and conversely for disapproval. Both groups of girls approve of the idea more than both groups of boys.

* II: School, question 14.
Columns 30 and 31. Parent's report of whether child likes school or not*

Parents were asked to answer yes or no to the question whether the child liked going to school now. The large majority answered quite unequivocally but a few gave variant answers. Percentages of straight yes's and no's were calculated.

According to parents' report more children of Group I like going to school than either of the other groups though Group III's percentage on this occasion is slightly higher than Group II's. Both groups of boys are reported to like school more than both groups of girls. P-boys are reported as most liking school and T-girls the group most disliking it.

The question arises how far these are true or accurate reports of the children's likes or dislikes and how far they are coloured by what the parent thinks is the case or wants to be the case. As noted above, when the children are asked whether they like school - with the possibility of a qualified yes or no as opposed to an outright yes or no - only negligible differences were shown between the school-sex groups (See Column 26)

Column 32. Parent's satisfaction with child's academic progress**

Parents were asked to indicate whether they were satisfied with the child's school progress under four headings: Yes; not entirely; not at all; don't really know. The responses were scored: Yes = 1; not entirely = 2; not at all = 3. On the principle applied previously that 'don't really know' can (but not necessarily does) operate as a cover, this category was scored 1.5. Scores are not reported in the table, as the intervals used are arbitrary. Rank order only is given. The actual scores of the three ability groups, however, were: Group I = 1.1; Group II = 1.5; Group III = 1.4. In this instance Group III achieves a higher rank order than Group II.

The parents of P-girls expressed most satisfaction, with T-boys' parents next. Parental satisfaction was again more marked for girls than boys.

* P2, question 3
** P4, question 15
Table 33. Ambition in Parent and Child

Columns 33 and 34. Source of parents' dissatisfaction with academic progress: child or school (See Column 32)*

The various replies to this open-ended question were inspected and sorted into two categories according to whether the child or the school was blamed for the child's (allegedly) poor scholastic progress (Column 32). Of course, only those parents who felt some dissatisfaction answered this question. The total percentage of parents expressing dissatisfaction was very similar in the two schools, namely 38% and 39% respectively. Summatiting the figures of Columns 33 and 34 produces the total percentage of parents involved in each case.

Group I parents express least dissatisfaction both with child and school, while, somewhat unexpectedly, Group II parents express most dissatisfaction on both counts. A much higher percentage of T-school girls are the target of parental criticism than T-school boys, whereas P-school boys receive more criticism than P-school girls. It seems likely that there is a real difference of attitude towards the sexes in T-school and P-school parents.

The T-school pattern is interesting in that the parents of T-girls express most dissatisfaction with the child, whereas the parents of T-boys express most dissatisfaction with the school. It must be borne in mind that we are dealing here with two different secondary modern schools, which may account completely for this difference of emphasis; however, the possibility remains of a difference of attitude towards girls as opposed to boys. In the case of P-school, the tendency is the same for both sex-groups, i.e. in both cases the school is blamed more than the children. Here boys and girls attend the same secondary school. P-boys arouse more criticism than any other school-sex group. Thus, generally speaking, the parents' criticisms are fairly well in line with what is known of the attainment and progress levels of the four school-sex groups.

Column 35. Percentage of parents favouring child staying on at school after 15*

Almost twice as many parents of Group I are in favour of their

* P, question 8.
Table 33

AMBITION IN PARENT AND CHILD

T-School = Townsend
P-School = Parkside

<table>
<thead>
<tr>
<th>Column Reference (R.O. = rank order)</th>
<th>32**</th>
<th>33</th>
<th>34</th>
<th>35</th>
<th>36</th>
<th>37</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Group 1 (N=22)</td>
<td>1</td>
<td>9</td>
<td>5</td>
<td>73</td>
<td>36</td>
<td>54</td>
</tr>
<tr>
<td>*Group II (N=41)</td>
<td>3</td>
<td>24</td>
<td>29</td>
<td>39</td>
<td>24</td>
<td>38</td>
</tr>
<tr>
<td>*Group III (N=18)</td>
<td>2</td>
<td>22</td>
<td>11</td>
<td>17</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>T-Girls (N=22)</td>
<td>3</td>
<td>36</td>
<td>5</td>
<td>50</td>
<td>27</td>
<td>57</td>
</tr>
<tr>
<td>T-Boys (N=15)</td>
<td>2</td>
<td>7</td>
<td>27</td>
<td>67</td>
<td>23</td>
<td>36</td>
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<tr>
<td>P-Girls (N=24)</td>
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<td>8</td>
<td>17</td>
<td>25</td>
<td>25</td>
<td>33</td>
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<td>P-Boys (N=20)</td>
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<td>25</td>
<td>30</td>
<td>40</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>All Girls (N=46)</td>
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<td>22</td>
<td>11</td>
<td>37</td>
<td>26</td>
<td>45</td>
</tr>
<tr>
<td>All Boys (N=35)</td>
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<td>17</td>
<td>29</td>
<td>51</td>
<td>29</td>
<td>34</td>
</tr>
<tr>
<td>All T (N=37)</td>
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<td>24</td>
<td>14</td>
<td>57</td>
<td>38</td>
<td>49</td>
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<tr>
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<td>16</td>
<td>23</td>
<td>32</td>
<td>18</td>
<td>33</td>
</tr>
</tbody>
</table>

** Rank 1 = Most satisfaction. (Ranks by sections)

* See footnote, Table 31, p.132.
child staying on at school than of Group II, and more than twice as many parents of Group II favour staying on than parents of Group III. Regarding school-sex groups, more parents of boys favour staying on than parents of girls in both schools. But the parents of T-school children are altogether more in favour of it than the parents of P-school children. There is thus both a sex difference and a school difference.

It is interesting to compare the present Column 35 with Column 28. Admittedly in the latter case the children are asked to state their attitude to the principle of staying on after 15, whereas in the former case parents are asked whether they approve of their child staying after 15. Nevertheless, the complete reversal of viewpoints summarised below in Table 33a, is striking.

<table>
<thead>
<tr>
<th></th>
<th>Children</th>
<th>Parents</th>
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<tbody>
<tr>
<td>T-girls</td>
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</tr>
<tr>
<td>T-boys</td>
<td>approve less</td>
<td>approve more</td>
</tr>
<tr>
<td>P-girls</td>
<td>approve more</td>
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</tr>
<tr>
<td>P-boys</td>
<td>approve less</td>
<td>approve more</td>
</tr>
</tbody>
</table>

Table 33a

Approve staying at school after 15 (Columns 28 and 35)

Column 36. Percentage of children whose intended or actual job is the same as their ideal job.*

The percentage of children whose actual (if they had already left school) or intended job matches up with their ideal job decreases from Group I to Group III. The question of interpretation is difficult. Is it that Group I children are better adjusted and hence more realistic in their choice of job? Or are they perhaps more able, by virtue of superior ability or recommendations, to obtain the job of their choice? Or is it that these children are rather more conformist, 'pro-establishment' and perhaps lacking in ambition, and thus accept more readily what is suggested to them?

The question arises again in connection with the very low percentage (10%) of P-boys whose intended and ideal jobs match up. It is known that this is a group of low achievers academically. Do

* II: Job, questions 1, 2 and 3.
they visualise themselves as unable to get the jobs they want, i.e. are they defeatist, or are they on the other hand unrealistically ambitious, perhaps with a suggestion of over-compensation?

In this connection the work on goal-setting behaviour appears relevant (Veness 1962) which showed that children with a history of failure tended to set themselves unrealistically high goals which they can never hope to achieve. These goals would appear to be fantasy-goals or wish-fulfilments. More able children tended to set themselves realistic goals which they can reasonably hope to achieve. It will be recalled that P-boys, the poorest achievers, had the highest score of any of the four groups on achievement motive in the Best Moments task. This finding perhaps lends support to the above conclusions. However, P-boys have the highest percentage of spare-time jobs (see Table 36) which suggests a certain realism or constructiveness.

Over-all, the question arises whether or not it is a desirable state of affairs that less than a quarter of the total population studied were apparently getting jobs that they really wanted to do.

Column 37. Average number of words written on the Parental Questionnaire

The number of words written on the PQ was totalled. Ticks, crosses and underlinings were not counted, only actual written words. Not only words written in answer to those questions demanding a written answer were scored but all words appearing for whatever reason. The purpose of this procedure was to provide a possible (objective) measure of parental concern.

The clear-cut nature of the differences between the three ability groups on this crude measure was a quite unexpected finding. So striking and regular are the differences that it seemed not unreasonable to accept this measure as a reliable guide (on a group basis) to the amount of parental concern and willingness to co-operate regarding the welfare (education?) of the children.

The very high average for T-girls is of interest. There are some grounds in these tables for assuming a difference of attitude to their daughters between T-school and P-school mothers. The former appear to have a higher degree of involvement or indentification with

---

* PQ
their daughters.

It need not be felt that the high average number of words produced by the parents of T-girls resulted in the positive association between the ability groups and mean number of words on the PA. On the contrary, these findings exist in spite of T-girls biased contribution, since Group I contains only 3 T-girls (14%) while Group II contains 8 T-girls (44%). If anything, T-girls have reduced the differences between the high and low ability groups by swelling the means of the lower groups.

T-school parents in general display more concern/co-operation than P-school parents, but here the bias of T-girls is certainly an influence. Possibly too the higher social (and thus probably intellectual) status of T-parents plays a part here.

Table 34 Social Relations with Peers

Column 38. Membership of all clubs and societies*

This information is not the same as that shown in Column 23 (although that information is included here) since this referred to membership of school societies only. Unfortunately the two sets of results of this Column and Column 23 are presented in a different form which makes direct comparison impossible. The present column shows average number of clubs per head of the group; the former column showed percentages of children belonging to one or more club.

As before the three ability groups are in regularly descending order, with Group I having the highest mean number of memberships per head. Both groups of boys show a higher mean number than both groups of girls, which was not found before in respect of school societies. The different methods of computing the results may well account for these differences. Boys are perhaps more 'clubbable' in general than girls, but may for various reasons care less for school clubs.

* CQ, question 13
CSR, question 4
II: Leisure, question 4
### Table 34

#### SOCIAL RELATIONS WITH PEERS

T-School = Townsend  
P-School = Parkside

<table>
<thead>
<tr>
<th>Column Reference</th>
<th>Membership Clubs/</th>
<th>Usually goes out with crowd</th>
<th>Usually goes out with friend</th>
<th>Has 1 or 2 friends (friend's estimate)</th>
<th>Has a lot of friends (friend's estimate)</th>
<th>Recessed to spend time away from home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(R.O. rank order)</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>*Group 1 (N=22)</td>
<td>38**</td>
<td>1.9</td>
<td>36</td>
<td>73</td>
<td>68</td>
<td>27</td>
</tr>
<tr>
<td>*Group 11 (N=41)</td>
<td>39***</td>
<td>1.2</td>
<td>37</td>
<td>76</td>
<td>76</td>
<td>20</td>
</tr>
<tr>
<td>*Group 111 (N=18)</td>
<td>40***</td>
<td>0.7</td>
<td>22</td>
<td>78</td>
<td>44</td>
<td>56</td>
</tr>
<tr>
<td>T-Girls (N=22)</td>
<td></td>
<td>1.0</td>
<td>27</td>
<td>86</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>T-Boys (N=15)</td>
<td></td>
<td>1.7</td>
<td>33</td>
<td>73</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>P-Girls (N=24)</td>
<td></td>
<td>1.2</td>
<td>29</td>
<td>83</td>
<td>63</td>
<td>25</td>
</tr>
<tr>
<td>P-Boys (N=20)</td>
<td></td>
<td>1.4</td>
<td>45</td>
<td>55</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>All Girls (N=46)</td>
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<td>1.1</td>
<td>28</td>
<td>85</td>
<td>65</td>
<td>28</td>
</tr>
<tr>
<td>All Boys (N=35)</td>
<td></td>
<td>1.5</td>
<td>40</td>
<td>63</td>
<td>69</td>
<td>31</td>
</tr>
<tr>
<td>All T (N=37)</td>
<td></td>
<td>1.3</td>
<td>30</td>
<td>81</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>All P (N=44)</td>
<td></td>
<td>1.3</td>
<td>36</td>
<td>70</td>
<td>66</td>
<td>27</td>
</tr>
</tbody>
</table>

**Mean number per child**  
* See footnote, Table 31, p. 132.

**Children claiming equal emphasis for both appear twice.**
Column 39 and 40. Do you like to go out on your own, with a friend or with a crowd?*

In reply to this question some children definitely stated a preference for a friend or a crowd; others said it depended, sometimes they preferred the one, sometimes the other. The third category, 'on your own', was seldom used and then only in conjunction with another category. The numbers using the former two categories were calculated (i.e. with friend, with crowd), but where a child claimed equal emphasis the choice was counted in both categories.

There is very little difference on either indicator between Groups I and II. Group III is apparently rather less gregarious. However, one pattern holds good for all three groups and that is that about twice as many children go out habitually with one friend rather than a crowd. The relatively low figure for Group III in respect of 'going out with a crowd' coupled with the highest (by a slight margin only) percentage for 'going with a friend only' is interesting, suggesting rather more social isolation. (This view though based on slender differences receives support from a different source, namely PQ, Columns 41 and 42).

In respect of the school-sex groups both groups of boys have higher percentages for 'going with crowd' than both groups of girls, while the latter have higher percentages than both groups of boys for 'going with a friend'. This would tend to tie in with the greater tendency for girls to have a regular friend of the opposite sex (Column 43)

P-boys have the highest percentage for 'going with crowd' and the lowest percentage for 'going with friend'. This difference from the other three groups is quite marked on both counts. There is here the suggestion of a different kind of social isolation, possibly, to that noted above, namely in the form of numerous shallow attachments. The tendency for this group, i.e. P-boys to have 'many friends' is (slightly) confirmed by information from the PQ (column 41)

There seems to be here a rather complicated interaction between ability, between sex groups in general, and school-sex groups at least as far as T-boys and P-boys are concerned.

**II: Leisure, question 6
Columns 41 and 42. Parents’ estimate of whether child has many or
on or two friends.*

Parents were asked to state whether the child has: many
friends; one or two only; none at all. The last category was avoided
almost entirely. So that although from the additional remarks of one
or two parents it seemed likely that the child was a real social isolate,
separate figures are not shown for this category.

There is the suggestion (column 41) that Group 11 is slightly
more serious than Group 1, for which there was a slight trend also
in Columns 39 and 40. This is perhaps not so very surprising in that
the able child will tend to study more and go out less than duller or
un-academic children (particularly, as we know, when 73% of Group 1
are taking public examinations).

The rather striking drop for Group 111 in respect of 'many
friends' and the relatively very high score in respect of 'one or two
friends only' is very suggestive of social isolation. Not, of course,
that the person with only one or two (perhaps very close) friends is
necessarily mal-functioning in any way. But there are other support-
ing indications of this group's poor success socially and otherwise.

Perhaps one of the most interesting points is that the same
picture tends to emerge from two quite distinct sources: from the child
himself (columns 39 and 40) and from the mother (columns 41 and 42).
Such cross-support lends a measure of validity and reliability to the
information obtained by these questionnaires.

P-boys, in an admittedly fairly close distribution, have
the highest percentage of 'many friends', which tends to confirm the
earlier trend for this group.

Column 43. Do you have a boy or girl friend? **

This question was asked as casually as possible. However,
in view of its taboo qualities, it is unlikely that a true reply was
given in every case. Nevertheless, once again the results are in
line with the tendencies so far noted in the social relations of this
population. Group 11 is slightly ahead of Group 1. Group 111 shows
a distinct drop.

* PQ. question 11
** 11: Leisure, question 6.
Both groups of girls obtain higher percentages than both groups of boys, this is probably due to the earlier physical maturing of girls. But there is also a school difference, so that T-school achieves a higher percentage than P-school. This is a little unexpected, in view of the lower socio-economic status of P-children, who might be expected to begin 'dating' earlier.

The markedly lower percentage of P-boys having girl-friends would appear to link with the other deviations from the norms of the population studied here. This holds true even if it is only a case of P-boys not admitting to having girl-friends.

Column 44. Percentage encouraged to spend time away from home.*

The percentages were calculated on the basis of the percentage of children answering definitely 'no' subtracted from 100. On this question Group I and II are again practically identical while there is a noticeable drop for group III.

Somewhat unexpectedly a great proportion among both groups of girls is apparently encouraged to spend time away from home than among the two groups of boys. This result may be spurious in the sense that boys may spend more time away under their initiative - and far from needing encouragement to do so in fact require discouragement from their parents' point of view. There is also a school difference, more P-school children being encouraged to spend time away from home.

Table 35 Emotional Profile

Column 45. Mean number of maladjustment symptoms per child reported by teacher (classroom behaviour).**

Teachers were asked to indicate classroom behaviour under 11 headings (a to k). Of these two (a and h) described normal behaviour. For the nine remaining, the number of ticks per child was counted and a group total and average calculated. At one stage an attempt was made in this and other sections to consider the number of active versus

* II: Leisure, question 13
**CSR, question 5 (In classroom).
Table 35

**EMOTIONAL PROFILE**

T-School = Townsend
P-School = Parkside

<table>
<thead>
<tr>
<th>Column Reference</th>
<th>45**</th>
<th>46**</th>
<th>47**</th>
<th>48</th>
<th>49***</th>
</tr>
</thead>
<tbody>
<tr>
<td>(R.O. = rank order)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Group 1 (N=22)</td>
<td>0.5</td>
<td>0.9</td>
<td>2.4</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>*Group II (N=41)</td>
<td>1.0</td>
<td>1.1</td>
<td>3.0</td>
<td>41</td>
<td>2</td>
</tr>
<tr>
<td>*Group III (N=18)</td>
<td>1.3</td>
<td>1.8</td>
<td>2.6</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>T-Girls (N=22)</td>
<td>1.4</td>
<td>1.4</td>
<td>3.5</td>
<td>36</td>
<td>4</td>
</tr>
<tr>
<td>T-Boys (N=15)</td>
<td>0.6</td>
<td>0.7</td>
<td>2.4</td>
<td>47</td>
<td>2</td>
</tr>
<tr>
<td>P-Girls (N=24)</td>
<td>0.6</td>
<td>1.1</td>
<td>2.4</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>P-Boys (N=20)</td>
<td>1.2</td>
<td>1.6</td>
<td>2.5</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>All Girls (N=46)</td>
<td>1.0</td>
<td>1.2</td>
<td>3.0</td>
<td>35</td>
<td>2</td>
</tr>
<tr>
<td>All Boys (N=35)</td>
<td>0.9</td>
<td>1.2</td>
<td>2.4</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>All T (N=37)</td>
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<td>1.1</td>
<td>3.0</td>
<td>41</td>
<td>2</td>
</tr>
<tr>
<td>All P (N=44)</td>
<td>0.8</td>
<td>1.3</td>
<td>2.5</td>
<td>32</td>
<td>1</td>
</tr>
</tbody>
</table>

**Mean number per child**

***Rank 1 = most liked  (Ranks by sections)

* See footnote, Table 31, p. 132
Table 35 contd.

<table>
<thead>
<tr>
<th>Column Reference</th>
<th>R.O.</th>
<th>50%</th>
<th>51%</th>
<th>52%</th>
<th>53%</th>
<th>54%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 (N=22)</td>
<td>1</td>
<td>68</td>
<td>32</td>
<td>68</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Group 11 (N=41)</td>
<td>2</td>
<td>49</td>
<td>51</td>
<td>61</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Group 111 (N=18)</td>
<td>3</td>
<td>50</td>
<td>50</td>
<td>61</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>T-Girls (N=22)</td>
<td>4</td>
<td>41</td>
<td>59</td>
<td>59</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>T-Boys (N=15)</td>
<td>1</td>
<td>60</td>
<td>40</td>
<td>53</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>P-Girls (N=24)</td>
<td>2.5</td>
<td>63</td>
<td>38</td>
<td>75</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>P-Boys (N=20)</td>
<td>2.5</td>
<td>55</td>
<td>45</td>
<td>60</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>All Girls (N=46)</td>
<td>2</td>
<td>52</td>
<td>48</td>
<td>67</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>All Boys (N=35)</td>
<td>1</td>
<td>57</td>
<td>43</td>
<td>57</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>All T (N=37)</td>
<td>2</td>
<td>49</td>
<td>51</td>
<td>57</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>All P (N=44)</td>
<td>1</td>
<td>59</td>
<td>41</td>
<td>68</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

* Rank 1 = highest rating on companionship.
(Ranks by sections)
passive maladjustment symptoms. Since the numbers of symptoms available for these two dimensions were not equal (giving different possible maximum scores therefore), together with the fact that the relative severity of symptoms was not known, the decision swung in favour of a simple global symptom count.

Group I has the lowest average number of symptoms, Group III the highest. There is a school-sex reversal, with T-girls having more symptoms than T-boys, and P-boys more symptoms than P-girls. The highest score was made by T-girls. Thus the pattern in the T-school population is atypical since boys usually receive higher ratings than girls.

Column 46. Mean number of maladjustment symptoms per child reported by teacher (emotional behaviour)*

Teachers were asked to indicate the child's emotional behaviour under 15 headings (a to o). All of these constitute disturbed behaviour. Each child received therefore a score (which might be zero) out of a possible 15. The scores were summed and averaged for the groups.

Once again Group I is reported as having least symptoms, Group III as having most. T-girls again have a higher score than T-boys, and P-boys a higher score than P-girls, as for Column 45. However the group with the highest mean on this occasion is P-boys, with T-girls in close second place.

Column 47. Mean number of maladjustment symptoms per child reported by parent.**

Parents were asked to indicate which, if any, of 20 symptoms (a to t) of emotional disturbance applied to their child, both now and during the past five years. The total number of symptoms ticked were counted. These symptoms ticked for 'now' and 'in the past' were counted twice. Children's individual scores were summed and averaged for the groups.

* CSR, question 6
** PQ, question 18.
Group I shows the lowest mean number of symptoms, with Group III a close second. As with the teachers' judgements, T-girls produce a higher mean than T-boys, and P-boys a fractionally higher mean than P-girls. The highest absolute mean number of symptoms is shown by T-girls. This last finding both (a) supports the view advanced earlier that the relationship between T-girls and their mothers is more intense than that between P-girls and their mothers (b) gains in significance because it agrees with the teacher's assessment of these girls, arrived at independently. Thus both parents and teachers separately consider T-girls to be a more 'difficult' group.

Column 48. Percentage of children indicated as having symptoms which have lasted for more than two years*

The number of children in each group reported as having one or more symptoms lasting more than two years was expressed as a percentage.

Group II has the highest percentage of such children, Group I the lowest. There is a school difference, with both T-groups obtaining higher percentages than both P-groups. There is also school-sex reversal with T-boys having a higher percentage than T-girls, and P-girls having a higher percentage than P-boys. This is rather unexpected, running counter to expectations about T-girls and P-boys.

Column 49. Liked by other pupils**

The teacher was asked to assess the attitude of other pupils to the child concerned by marking one of six categories (a to f), ranging from Very Popular to Disliked. It was decided that these items could be arranged in a rank order, from most to least popular. The rank was then assigned as a score to the category in question, namely: d=6, a=5, c=4, f=3, b=2, c=1. Group scores were summated and averaged.

Rank orders only are given in the Table. (Actual scores for the three ability Groups were: Group I = 4.8; Group II = 4.4; Group III = 4.3.) Group I achieves the highest popularity score, Group III the lowest. The possibility of halo effect, as usual, cannot be overlooked. Teachers may tend to rate the more intelligent (more industrious)

* PQ, question 19
** CSR, question 5 (Attitude of other pupils)
pupils are more popular than the duller children.

Of the school-sex groups P-boys achieve the highest rating. This appears to run counter to the suggestions so far made about this group. However, it does not necessarily contradict the idea that this group is good on superficial but less good on deeper relationships. The achievement of the lowest rating by T-girls is perhaps in line with the high maladjustment rating by teachers and parents.

Column 50. Companionship Rating*

Teachers were asked to judge companionship by ticking appropriately a possible total of 10 categories (a to j), ranging from Very good mixer to Distant, wanders off alone. Several teachers ticked more than one category. Where this occurred the child was given an appropriate mean score. In the process of assigning a numerical value to the categories, it was decided that certain of them were of more or less equal standing, and these were therefore given the same values. The actual values assigned were:  a, g, j = 4; b, d, e = 3; h = 2; c, i = 1.

Once again Group I achieves the highest rating and Group III the lowest. Rank orders only are reported in the Table. (Actual values obtained were: Group I = 3.7; Group II = 3.4; Group III = 3.1) T-girls again achieve the lowest rating.

Column 51 and 52. Discuss problems with parents or discuss problems with others**

A number of variant answers were given to this question. Apart from one or both parents, children also named various other relatives. Some said parents and friends, others friends alone. It was decided to differentiate between those who mentioned parents, whether as the sole, or one of several sources of help, and those who did not mention their parents at all. The figures given in the Table are group percentages, summating to 100%.

Group I appear closer to their parents than either Group II or

* CSR, question 5 (Companionship)
** II: Leisure, question 10.
Group III. The two last show virtually identical results. The fact that the brightest group appear to have a closer relationship with their parents is of course, in line with the finding in Column 37 that the concern of the parents, as measured by number of words on the PQ, is greatest for Group I (and least for Group III)

Turning to the school-sex groups, T-girls seem to have the most distant relationship with their parents (and conversely the greater reliance on others) P-boys have the second most distant relationship with parents. It is extremely interesting that T-girls once again show up as having an uneasy relationship with their mothers, while P-girls on the contrary have the closest mother-relationship of all four groups. The relatively poor mother-relationship of P-boys is also again in line with certain social deficiencies already noted. One is forced to consider at this stage whether the degree of communication between parent and child does not have some very real bearing on the question of attainment, to say nothing of the matter of general social adjustment.

Column 53. Percentage of children admitting to daydreaming*

The percentage of children admitting to daydreaming is highest for Group I. There is, of course, no way of knowing how many, if any, of those who denied having daydreams, do in fact indulge in them. The percentage of girls is higher in each school than for boys in that school. Daydreaming may be more 'permissible' for girls in our society. However, P-boys score fractionally higher than T-girls.

There is additionally a school difference, with P-school apparently more prone to this behaviour than T-school. However, once again this difference may merely reflect a greater willingness to admit to daydreaming, rather than a real difference in incidence.

Column 54.

This column is a repeat of column 36, q.v.

* II: Leisure, question 15.
Section 5:2

A breakdown of some residual data

The basic structure of the table given in this section is similar to that of the tables in Section 5:1 and is to be regarded as a continuation of those tables. In Table 36, therefore, an analysis of some further replies to questions in the Individual Interview is presented. This is given largely without comment and it is hoped that the table is self-explanatory. All figures given are percentages.

Of interest are possibly the differing spending and saving habits of ability Group 11 on the one hand contrasted with those of Groups 1 and 111 on the other (Questions 3 and 3B, Leisure). Group 11 appears more outgoing and open-handed than either of the others. The view gains support from the replies to Question 7. Group 11 appears to devote more of its energies to the pursuit of a 'good time'. The behaviour of Groups 1 and 111 may converge here for different reasons. Group 1 is possibly a more 'serious' group, in the that 73% of them are taking or have taken public examinations (Section 5:1). Group 111 are better described as more socially inept and inclined to be isolated (Section 5:1). It is perhaps a little unexpected that a wide proportion of the ablest group have spare-time jobs, since they are in many cases preparing for public examinations. Perhaps however, these are children with more drive generally.

The percentage of 'positive', i.e. favourable memories of primary school (Questions 2 & 3, Primary School) increases from Group 1 down to Group 111. This at first glance surprising finding may be explained by the fact that Group 1 are more successful at and better adapted to secondary school than the remaining groups and hence are possibly less inclined to hark back to 'the good old days' of junior school. Townsend is apparently rather more pleasantly recollected than Parkside.
Table 36

Analysis of Replies to Further Questions on Individual Interview

T-School = Townsend
P-School = Parkside

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Q.1 (Leisure)</th>
<th>Q.2 (Leisure)</th>
<th>1/- to 5/-</th>
<th>5/- to 10/-</th>
<th>10/- to 50/-</th>
<th>£5/- or above</th>
</tr>
</thead>
<tbody>
<tr>
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<td>55</td>
<td></td>
<td>5</td>
<td>36</td>
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<td>18</td>
<td>44</td>
<td></td>
<td>33</td>
<td>28</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>T-Girls</td>
<td>22</td>
<td>32</td>
<td></td>
<td>13</td>
<td>36</td>
<td>41</td>
<td>0</td>
</tr>
<tr>
<td>T-Boys</td>
<td>15</td>
<td>67</td>
<td></td>
<td>20</td>
<td>20</td>
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*The number of miscellaneous items in this instance exceeded the number of children in the group.*
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Summary of the findings

Four questionnaires were used in this study: the Children's Questionnaire and Structured Individual Interview (dealing directly with the child); the Confidential School Report (completed by the teacher or headmaster) and the Parental Questionnaire (completed by the mother).

The data from these questionnaires was first coded, subsequently analysed and finally quantified for its presentation in the form of detailed tables under five headings: Success in school; Attitude to school; Ambition in parent and child; Social relations with peers and; Emotional profile.

Breakdowns are given for the four school-sex groups, all girls and all boys, for the two schools separately. In addition three ability groups were established on the basis of the teacher's estimate of ability. The designation Group I was given to the ablest group, Group II to those of average ability and Group III to the least able. These groups represent approximately 25%, 50% and 25% of the population respectively, and constitute a random distribution of the four school-sex groups; Parkside children predominate slightly in Group I.

Consistently on all variables examined, almost without exception, Group I achieved the highest rating and Group III the lowest, with Group II tending to occupy a mid-position between them. Thus Group I, in addition to being the most able group scholastically, is also best at sport and non-academic subjects, over-achieves in respect of measured potential, has better relationships with teachers, is more popular among the other children, likes school better, has parents who are more interested in their child's development, is more likely to match up intended career with ideal career, has fewest maladjustment symptoms, and so on. The exact reverse is true of Group III. Group II, as stated, occupy a mid-position, with an important exception in respect of saving and spending habits, including the localities frequented in the course of spending. Group II appears to be more open-handed with money than either of the others, gets about more and is more bent on having a good time. It is suggested that the behaviour of Groups I and III converge in these respects for different reasons.

Of the four school-sex groups, those of main interest are Townsend girls and Parkside boys. Townsend girls receive the highest maladjustment ratings from both teachers and parents. On two out of three ratings they received the highest score and on the third...
rating the second highest score. They are also judged to have most 'psychological distance from teacher'. They achieve the highest rating on definitely disliking school, also the highest score as the source of parental dissatisfaction for lack of progress. They have the highest mean number of words on Parental Questionnaire - suggesting a fair amount of involvement on the part of the mother - but the lowest score on discussing problems with parents, suggesting that this involvement is either one-sided or even possibly slightly neurotic. (Parkside girls have the highest score on discussing problems with parents) Townsend girls receive also the lowest ratings on popularity with other pupils, and companionship. In favour of Townsend girls are the large number winning prizes and holding positions of responsibility.

For Parkside boys interest centres in the fact that they have the lowest percentage for matching up intended and ideal job: the highest percentage for going out with a crowd, but the lowest for going out with a friend: the lowest percentage for having a friend of the opposite sex: the highest number of maladjustment symptoms under emotional behaviour. Points apparently in favour of Parkside boys are that they have the highest percentage for spare-time jobs, by far the least pocket money but nevertheless are also by far the best savers.

Sex differences are shown for the following: percentages taking exams; in favour of boys; difficulties with school-work, boys being judged to have more difficulties than girls; attendance, boys having a better record, and long absences, where girls are the worse offenders; wanting to reorganise schools, girls being more dissatisfied: staying on at school after 15, the percentage of boys being higher; approval of the principle of staying on after 15, this being approved more by boys, membership of clubs, boys tending to be more 'clubbable'; going out with a crowd as opposed to a special friend, boys showing this pattern more; having a friend of the opposite sex, where girls obtain a higher percentage; encouragement to spend time away from home, girls receiving more encouragement, daydreaming, where girls are more prone; spare-time jobs, boys having a much higher percentage; amount of pocket-money, girls receiving more; and spending money on visits to the cinema, which involves boys rather more heavily.

School-group differences are shown for: percentages taking exams, in favour of Townsend; staying on at school after 15, Townsend having the far higher percentage; for parental approval of staying on after 15, where more approval is shown by Townsend parents; mean number of words on PQ, Townsend parents writing more; day-dreaming, Parkside admitting to this rather more; time spent in youth clubs, Parkside stating more time; and recollections of primary school, Townsend being more favourably recollected.
SECTION 6

GENERAL SUMMARY AND CONCLUSIONS
Section 6  General Summary and Conclusions

The present study constitutes a follow-up of a much larger, longitudinal investigation of two junior schools, Townsend and Parkside, holding definite but opposite views on education. Whereas Townsend adopted a firmly traditional approach, Parkside favoured an equally definite progressive approach to the learning process. As in the earlier investigation, standardised tests of attainment, projective tasks and questionnaires were administered. However, no full test of intelligence was given. The follow-up population consisted of a non-random sample of 81 children aged 15 years, in their final year at secondary modern school.

There were, nevertheless, serious objections to considering the present investigation as a simple continuation of the original comparison of traditional and progressive approaches to education. These objections centred in the fact that the children of the present study had left the two junior schools concerned four years ago and proceeded to four different secondary modern schools. Only one of these four secondary schools could be said to continue the very explicit policy of either junior school. The remaining three, like most schools, pursued middle-of-the-road, eclectic policies which could not be described by terms as specific as traditional or progressive.

However, there were on the other hand fairly compelling reasons why the basic terms of reference of the original study should be retained. These were, on the negative side, the difficulties of cross-referencing with the (findings of the) original study in the event of some other frame of reference being devised. The four school-sex groups of the original study (namely Townsend girls, Townsend boys, Parkside girls and Parkside boys) would, for instance, have become five school-sex groups in the follow-up by reason of the split between two secondary schools in one case. On the positive side, it is clear that despite the change of school (at 11 years) from junior to secondary modern, the children experienced throughout the whole period continuity of socio-economic status, family relationships and out of school environment in general, factors which are as important as school treatment.

For these and other reasons the terms of reference of the original study were retained, even though the continuity implied thereby is in part illusory. The impact on the majority of children of four years of neither particularly traditional nor particularly progress-
ive secondary school treatment remained. Its effects as far as possible were taken into account.

Three standardised tests were administered to sample scholastic attainment and progress, namely the Vernon Graded Arithmetic/Maths test, the WISC Vocabulary sub-test and the N.F.E.R. Secondary Reading Test 2. The results of earlier testings were also available from the original junior school study, in particular Cornwell Intelligence Quotients obtained at 11 years of age. The rank order of groups on mean I.Q., with a maximum difference of 10 mean I.Q. points between extreme groups, was Townsend girls, Townsend boys, Parkside girls and Parkside boys.

The features of chief interest in the findings of this section were the outstanding performance of Townsend boys and the very reasonable performance of Parkside girls. In this connection it should be noted that Townsend boys were the one group which experienced continuity of school treatment (a traditional approach) from junior to secondary modern school. On the negative side were the relatively poor performance of Townsend girls, the group with the highest mean I.Q., and Parkside boys. The detailed picture was nevertheless much more complex, with the very bright, the average and the very dull children in each group tending to behave very differently.

Townsend boys produced the best over-all attainment record and the best progress record on both models of progress applied. Parkside boys tended to have the poorest record. This, however, was the group with the lowest potential in terms of measured intelligence. When comparisons were made between children of similar potential, it was found that the duller Parkside boys actually tended to perform rather better than the duller Townsend boys. Parkside boys, moreover, achieved higher scores than Parkside girls at all levels of intelligence on the WISC Vocabulary sub-test.

Parkside girls in general performed better on arithmetic than Townsend girls, despite socio-economic and mean I.Q. differences favouring the latter. Furthermore Parkside girls tended to outshine even Parkside boys in this measure, a remarkable performance in view of known sex differences heavily favouring boys of this age.

Although the duller Townsend girls (and in the case of arithmetic virtually all the Townsend girls) tended to fall short of
the attainments either of Parkside girls or of Parkside boys or both, nevertheless, the brighter Townsend girls (in the case of arithmetic only the very bright) always produced a better performance than the brighter members of the two Parkside groups.

Regarding sex differences, the boys in each school produced higher attainment scores at all levels of intelligence than the girls on the WISC Vocabulary sub-test, contrary to expectations in terms of sex differences for this type of material. On the N.F.E.R. Reading Test again all boys in Townsend achieved a better performance than all girls, but at Parkside only the duller boys produced better scores than the duller girls, both results, however, once again being contrary to expectation. A further reversal of expectation based on known sex differences was observed in the arithmetic performance of the brighter Parkside girls, which exceeded that of the brighter Parkside boys, and the close approximation also to the duller boys' scores by the duller girls.

There was a tendency for Townsend as a whole to do better than Parkside as a whole, even when differences in intelligence were allowed for, especially in the case of brighter children. The notable exception to this statement was the low level of achievement in arithmetic by Townsend girls. Nevertheless, the duller children at Parkside in almost all cases do better than the duller children at Townsend. In addition, some at least of Townsend's superior achievement, especially in the case of the two verbal tests, must be ascribed to the socio-economic and cultural advantages which this population has over Parkside.

Examination of the projective data, as far as concerned the Best Moment of My Life, the Ideal 'erson and the 'icked Deed' scripts, revealed the existence of patterns of responses, which tended to link differentially, not so much with measured intelligence, as with level of attainment and academic progress. Moreover, when results obtained in previous years, where available, were inspected, it appeared that children move through regular stages of development, probably phylo-gentically determined, which can be detected from the responses given to the various tasks. There would seem to be wide variations in the ages and speeds at which children pass through these stages. In such terms it was possible to speak of a given child's maturational level.

While it must be emphasised that these are tendencies which cannot be assumed to be true of every individual, it appeared that more
intelligent children tend to reach a given stage earlier than less intelligent children, and girls before boys. Therefore children at Townsend school, especially in the case of girls, tend to be more mature in the sense defined than children at Parkside, especially in the case of boys.

The retrospective essays were analysed in terms of recurrent themes. As expected, girls tended to mention marriage and children more often than boys. More boys saw themselves emigrating or settling in another town, whereas girls mainly envisaged settling in their home town. Achievement motive was displayed by far more boys than girls. Apart from findings of this kind, the most interesting results were obtained from Parkside boys, who had by far the lowest incidence of mention of marriage and the highest incidence for a sad, lonely old age. On the basis of the retrospective essay eight children (4 Townsend girls, 1 Parkside girl and 3 Parkside boys) were chosen for further detailed case study (Appendix A). The majority of these children proved to have relatively deep-seated behaviour and other problems, in three cases coupled with a severely disturbed home life.

The data from the four questionnaires, namely the Children's Questionnaire, the Structured Individual Interview, the Confidential School Report and the Parental Questionnaire, after coding, analysing and quantifying, was reported not only in terms of the four school-sex groups, but of three ability groups based on teacher's estimate of ability. By construction, individuals from the four school-sex groups were randomly distributed throughout the ability groups. However, Group I, the ablest group, contained a slight predominance of Parkside children.

On all of a large number of counts, almost without exception, Group I had the highest positive rating, that is, in non-academic achievement, in attitude to school, relationship with peers and relationship with adults. Group III had the lowest rating on all counts. The conclusion from these findings is that those who make a good adjustment or achieve success in one direction tend also to be those who succeed in other directions. One very important instance of this process was seen in the mean discrepancy scores of the groups. In this instance the discrepancy score was the difference between actual achievement and predicted achievement on the basis of potential, i.e. measured intelligence. Group I produces positive discrepancy scores, denoting over-achievement, while Group II produces negative discrepancy scores, denoting under-achievement. Group III produces still larger, negative scores.
Of the school-sex groups, those calling for most comment are Townsend girls and Parkside boys. On a number of counts Townsend girls appear to be the most maladjusted of the four groups, having the poorest social relationships including relationship with mother, which appears to have neurotic overtones. Positive achievements of Townsend girls are highest mean number of prizes and positions of responsibility. Parkside boys incline to rather shallow social contacts, have the lowest incidence of friends of the opposite sex, and the poorest matching of intended with ideal job. They have the highest score on one rating of maladjustment and the second highest on the two others. Positive achievements of this group are the highest incidence of spare-time jobs and, despite receiving the smallest amount of pocket-money, the highest incidence of saving.

Townsend boys and Parkside girls show correspondingly more favourable profiles.

A Note on the General Summary

In the above general summary an apparent contradiction emerges in respect of Townsend girls. On the one hand it is stated, in terms of academic performance, that this group makes a relatively poor showing, at least in some directions, compared with other groups. Later, in terms of the projective data, it is suggested that Townsend girls are the most advanced maturationally and that such advancement associates with high attainment and progress. Later again, reviewing data obtained from the questionnaires, it is argued that these girls constitute the most maladjusted group. Notwithstanding, they win more prizes and hold more positions of responsibility than any other group.

The probable answer to these seeming contradictions is that one is not necessarily speaking of the same members of that group on the two occasions. The label 'Townsend girls' is after all a methodological convenience embracing a certainly very mixed group from an empirical point of view. A further point is that contradictions can exist within the same individual. An excellent instance of this is provided by the case study of Christine (Appendix A), a Townsend girl, whose behaviour record is extremely poor, but who nevertheless over-achieves in all three standardised tests, in addition to winning prizes.
General Conclusions

The general conclusions of the present study can only be of the most cautious and tentative kind. The reasons for such caution have been indicated at various points in the text and are summarised here.

Firstly, the number of children studied is small (N=81) When broken down for traditional and progressive treatments the populations are 37 and 44 children respectively. Moreover, the range of academic performance tested was also not large, consisting of three standardised tests. On the other hand a considerable amount of projective data and background information was available for these children, as well as the results of earlier testing.

It has also not proved possible to isolate the effects of school treatment from socio-economic and environmental influences. Only in two instances was the effect of school treatment reasonably clear, namely in the fact of Parkside girls' higher-level performance in mathematics as compared with Townsend girls, who had both socio-economic and mean I.Q. differences in their favour; and in the fact that the tendencies noted in junior school were accelerated in the case of the one school-sex group, i.e. Townsend boys, who experienced continuity of school treatment at the secondary stage. While these instances are suggestive, nevertheless in all other cases where school treatment is discussed it must be understood to mean school treatment taken together with the influence of the appropriate socio-economic environment.

A number of further points need to be singled out. In reporting group findings and group behaviour, as in the present study, one tends to lose sight of those members of the group who do not behave as the majority do. If 63% of Parkside girls discuss their problems with the parents, the fact remains that 37% do not. Moreover, group trends over a period may show little change, even though individuals within these groups have meantime reversed their positions, so that these individual changes are effectively masked.

Relatively arbitrary or accidental groupings, such as the school-sex groups of this study, as opposed to groupings formed on the basis of a hypothesis, tend to contain such wide variations of the type or behaviour in terms of the individuals comprising the group that the value of any collective statement is considerably reduced.
A possible example of this is presented by Townsend girls in particular and by the general tendency noted for able, average and dull children within each school-sex group to behave differently. Similar objections can be raised to the use of blanket terms like 'school-treatment' as if they constituted a single variable. In fact such a term is a package of an indeterminate number of variables, including school policy, the varying personalities of individual teachers and the other children who make up the population, and so on. The importance of the other items in the total equation, especially teacher personality, as distinct from the actual traditional or progressive school policy may be understood if one tries to imagine the staff of the progressive school teaching by traditional methods or the traditional staff teaching by progressive methods.

Finally, it must again be emphasised that in any case this study forms a continuation of the original comparison between progressive and traditional methods only in a limited sense.

Given these limiting and conditional factors, some general statement is nevertheless possible. It appears to be 'match drawn'.

In the secondary modern population studied it seems that boys, of the social environment and intelligence range appropriate to Townsend, tend to do better under a traditional approach to education than boys of the social environment and intelligence range appropriate to Parkside do under a progressive approach. Girls, of the social environment and intelligence range appropriate to Parkside, do better under a progressive regime than girls of the social environment and intelligence range appropriate to Townsend do under a traditional regime. Taking intelligence alone, it appears that brighter children do better with traditional methods while duller children do better with progressive methods. The full generalisation, therefore, is that boys as a whole and the more intelligent girls do better in a traditional framework, while girls as a whole and the less intelligent boys perform best in a progressive framework.

More social and emotional deviance was noted in the girls in the traditional school and in the boys in the progressive school, than in the other groups.

In addition this study confirms the findings of numerous other studies that bright children tend to get brighter, and dull children duller, with increasing age, and that the children who fail or make poor
adjustments in one area tend also to be the children who fail and adjust poorly in other areas.
In Section 4:5 of this report extracts were quoted from the retrospective essays of eight children, namely 4 Townsend girls, 1 Parkside girl and 3 Parkside boys. No Townsend boys were included. Already in the Section indicated (4:5) some further information about the children was given from other areas of the report. In this Appendix the data from Section 5:1 (i.e. from the four questionnaires) which was there shown in terms of group incidence, is now given individually for each of the above 8 children.

That part of the data (Columns 1-13) which can be meaningfully presented in table form is shown in Table 37. The remainder is reproduced verbatim at greater length. A key is provided for the numbered column references. Sources of information and fuller explanations of the column headings are given in Section 5:1. The column numbers are the same throughout.

The eight children considered here are neither a random nor a representative sample of the population studied. They were chosen for more detailed report simply and solely because they wrote a retrospective essay which, in the opinion of the research team, was in one way or another of more than usual interest.

The key to the column reference numbers follows, and below this the individual reports. In brackets after each heading is shown the source of the information, i.e. parent, teacher or child.

Headsings key to the numbered column references of the individual reports (See also Section 5:1)

Column 14 Whether child is taking a public examination (Teacher)
Column 15 Whether any prize, certificate or award gained during school career (Teacher and child)
Column 16 Positions of responsibility held during school career (Teacher and child)
Column 17 Parent's estimate of difficulties with school work (Parent)
Column 18 Classroom behaviour (Teacher)
Column 19 Approaching teacher (Teacher)
Column 20 Attitude to school work (Teacher)
Table 37
PARTIAL TABULATION OF ADDITIONAL CASE STUDY MATERIAL

For a fuller description of these column headings see Section 5:1 and Tables 31 to 35

<table>
<thead>
<tr>
<th>Column Reference number</th>
<th>Academic score</th>
<th>Non-Academic score</th>
<th>Parent's estimate of academic ability</th>
<th>Cornell I.Q. (at 11 years)</th>
<th>MISC Vocabulary Standard Score</th>
<th>Vernon Arithmetic/Maths score</th>
<th>NFER Secondary Reading Test Score</th>
<th>MISC Vocabulary discrepancy score</th>
<th>Vernon Arithmetic/Maths discrepancy score</th>
<th>NFER Secondary Test 2 discrepancy score</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td>6-7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Wendy (T-Girl)</td>
<td>3.2</td>
<td>3.8</td>
<td>3</td>
<td>101</td>
<td>10</td>
<td>34</td>
<td>25</td>
<td>+1</td>
<td>-2</td>
<td>+4</td>
</tr>
<tr>
<td>Linda (T-Girl)</td>
<td>3.5</td>
<td>3.8</td>
<td>3</td>
<td>99</td>
<td>9</td>
<td>38</td>
<td>14</td>
<td>0</td>
<td>+3</td>
<td>-6</td>
</tr>
<tr>
<td>Pat (T-Girl)</td>
<td>3.6</td>
<td>3.5</td>
<td>3</td>
<td>74</td>
<td>5</td>
<td>24</td>
<td>14</td>
<td>0</td>
<td>+4</td>
<td>+3</td>
</tr>
<tr>
<td>Christine (T-Girl)</td>
<td>3.3</td>
<td>3.5</td>
<td>3</td>
<td>105</td>
<td>11</td>
<td>41</td>
<td>24</td>
<td>+1</td>
<td>+2</td>
<td>+2</td>
</tr>
<tr>
<td>Vivienne (P-Girl)</td>
<td>3.3</td>
<td>3.3</td>
<td>3</td>
<td>87</td>
<td>5</td>
<td>27</td>
<td>10</td>
<td>-1</td>
<td>-3</td>
<td>-5</td>
</tr>
<tr>
<td>Robert (P-Boy)</td>
<td>2.5</td>
<td>3.0</td>
<td>2</td>
<td>81</td>
<td>5</td>
<td>34</td>
<td>13</td>
<td>-1</td>
<td>+5</td>
<td>-1</td>
</tr>
<tr>
<td>Richard (P-Boy)</td>
<td>3.7</td>
<td>4.5</td>
<td>4</td>
<td>64</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>+3</td>
<td>-14</td>
<td>-1</td>
</tr>
<tr>
<td>Norman (P-Boy)</td>
<td>4.2</td>
<td>3.5</td>
<td>4</td>
<td>84</td>
<td>7</td>
<td>19</td>
<td>7</td>
<td>+1</td>
<td>-12</td>
<td>-8</td>
</tr>
</tbody>
</table>

* Cols. 4 & 5, showing in the group table percentage of parents who under- or over-estimate their children, are omitted
The girl divided within herself, described in the retrospective essay, is seen again in the detailed information obtained from the four questionnaires. There appear to be two sides to Wendy's character, what one might call her public and her private self. Certainly many people suffer from this dichotomy to a degree, but Wendy possibly experiences it more than most. On the one hand her school behaviour (public face) is normal, almost self effacing. No prizes, no positions
of responsibility, normal good behaviour in class (but 'plausible').
But given the opportunity she voices a great deal of forceful
criticism about school (24-26 etc.). Moreover, her mother reports
insolence, tension and headaches at one stage. A hint of her diffic-
ulties in this direction is given again in the teacher's statement that
she is only 'tolerated' by the other pupils, and, of course, by the
teacher's use of the word 'plausible' earlier. Nevertheless despite
the hidden rebellion and devaluation of school, her level of scholastic
attainment is reasonable, and the retrospective essay was well written.
So it seems that her rebelliousness has not reached (has not been
allowed to reach?) an overt rejection of school values and goals, with
resultant under-achievement. To this extent again, the public face
is preserved.

Notes: The numbers in brackets are the column reference numbers.

(14) No public examinations (15) No awards, prizes or certificates
(16) No positions of responsibility (17) Difficulties with school
work from time to time (18) Normal good behaviour in class, but
'plausible' (19) Normal approaches to teacher (20) Normally
interested in school work (21) School attendance good (22) No
long absences (23) No membership of school societies (24 and
25) Criticisms of school: should be no homework unless taking exams;
would pay more attention in school if no work after school; teaching
should not be forced into, you should enjoy lessons; easier to learn
if teacher gets to know you (26) School is okay meeting friends,
but not interesting, it's boring; I grumble about having to go to
school; I don't like homework (27) Leaving school at 15 (28 and
29) Staying after 15 not a good idea (30 and 31) Parent says child
does not like going to school (32) Intended and ideal job not the
same (37) Total of 4 words written on Parental Questionnaire
(38) Member of a Youth Centre (39 and 40) Usually goes out with
a crowd (41 and 42) Parent says child has many friends (43) Has
a boyfriend (44) Are you encouraged to spend time away from home?
- Depends (45) See 18 (46) Nothing reported by teacher about
emotional behaviour (47) Parent reports child is symptom-free now
but within the last five years has been insolent, highly strung, had
headaches and was restless (48) No symptom lasted more than two
years (49) Teacher reports that she is 'tolerated' by other
pupils but (50) is 'friendly' (51 and 52) Tells almost everything
to mother, but discusses problems with friends of same age with similar
problems. Claims that parents don't understand, they grew up in
different circumstances. (53) Yes to daydreaming.

Linda (Townsend)

Linda appears to be a withdrawn, rather depressed child. This
is not immediately obvious. Like Wendy, she preserves a public face. No hint of her difficulties would be gained from such remarks as 'very well behaved in class' or 'school attendance very good'. The present case serves as a warning against accepting such statements in isolation and at face value. Pointers to the true state of affairs are found in comments like 'talks to teacher only when alone', 'tolerated' by other pupils. It is in behaviour of this kind that the conformity of the withdrawn child differs from the usual adjustment of the normal child, which it often closely resembles. In the further statements 'solitariness', 'thin-skinned', 'still often moved to tears by the loss of her father last year', the picture of the very depressed child emerges. Quite how far the death of her father accounts for this depression is difficult to say. (Linda is an only child) In her retrospective essay Linda does not marry, or even mention the subject, but lives at home with her mother, apparently without any real friends.

Notes: The numbers in brackets are the column reference numbers. The girl's father died the year before.

(14) No public examinations (15) No awards, prizes or certificates
(16) No positions of responsibility (17) Never any difficulties with schoolwork (18) Very well behaved in class (19) Talks to teacher only when alone (20) Normally interested in school work (21) School attendance very good (22) No long absences (23) Not a member of any school societies (24 and 25) Satisfied with schools as they are (26) Rather likes school (27) Not staying on after 15 (28 and 29) Does not really approve of principle of staying on after 15. Only those who want to (30 and 31) Parent says child likes school now. (32) Parent satisfied with her school progress (33 and 34) - (35) Does not want her to stay on after 15 (36) Intended job and ideal job are the same (37) Total of 2 words written on Parental Questionnaire (38) Not a member of any clubs or groups (39 and 40) Usually goes out with a friend (41 and 42) Parent states she has many friends (43) Has no boyfriend (44) Not encouraged to spend time away from home (45) See 18 (46) Teacher reports 'solitariness' for emotional behaviour. Says she is extremely emotional and thin-skinned. She is still often moved to tears by the loss of her father last year (47) No maladjustment symptoms reported by mother (48) - (49) 'Tolerated' by other pupils (50) But rated as 'friendly' under companionship (51 and 52) Talks about her problems to friends (53) Yes to having daydreams

Pat (Townsend)

Pat is a girl with a low I.Q. (74) who nevertheless has made
a fair success of her school life. She is even planning to take an examination (Pitman's) and staying on at school until she is 16. She clearly likes school. From her mother's remarks about over-timidity and previous poor appetite it would appear that Pat has successfully combatted a tendency to withdrawal, since she is 'liked by other pupils' and 'a very good mixer'. The retrospective essay appeared at first glance to contain elements of morbidity - paralysis of the legs in later life, etc. However, this kind of detail may result from a somewhat vivid imagination. Even if the tendency to morbidity or depression exists in this child, it appears at present to be well under control.

Notes: The numbers in brackets are the column reference numbers.

(14) No public examinations (but hopes to take Pitman's examination at some point) (15) No prizes, certificates or awards (16) No positions of responsibility (17) Difficulties with school work from time to time (18) Very well behaved in class (19) Likes talking to teacher (20) Tries very hard at school work (21) Average attendance school record (22) Hospitalised for removal of a cyst (23) Not a member of any school societies (24 and 25) Would like not to have homework, just for a bit (26) Some days likes school, some days not. 'Don't like P.E. much' (27) Staying on for one year after 15 (28 and 29) Thinks principle of staying on after 15 a good idea. Helps to improve education and makes for a better person. (30 and 31) Parent reports child likes school (32) Parent satisfied with school progress (33 and 34) - (35) Parent approves of child staying on after 15 (36) No statement about ideal job - don't know. (37) Total of 13 words on Parental Questionnaire (38) Not a member of any club or group (39 and 40) Usually goes out with a friend, not a crowd (41 and 42) Parent reports has only one or two friends (43) Has no boyfriend (44) Not really encouraged to spend time away from home (45) See 18 (46) Nothing reported under emotional behaviour (47) Lack of concentration at one time, over-timidity now and in past, poor eater at one time (48) No symptom lasted more than two years (49) Liked by other pupils (50) Very good mixer, friendly (51 and 52) Discusses problems with parents (53) Does not day-dream

Christine (Townsend)

Christine's essay is very well written and reminiscent of Wendy's. There is the same conflict between acceptance of everyday and a desire for a life of excitement. Christine's rebellion against
uniformity is, however, much more overt. Her teacher reports 'constantly needs petty correction, troublesome when unsupervised, unreliable.' She is 'tolerated and liked only by own set'. Her insecurity is evident - 'anxious to be in with gang'. Nevertheless, like Wendy, Christine is successful academically, over-achieving on all three standardised tests. She plays up in class, but (makes sure that?) she does well all the same. This is perhaps due to the influence of the quieter, saner self, written about in the retrospective essay. Much of Christine's bad behaviour may be accounted for by the fact that her father deserted the home last year.

Notes: The numbers in brackets are the column reference numbers.

(14) No public examinations (15) Sports prize 1958, Handwriting prize 1958 (16) No positions of responsibility (17) Has difficulties with school work from time to time (18) She constantly needs petty correction, tends to be troublesome when unsupervised, unwilling to accept responsibility and unreliable (19) Normal approach to teacher (20) Only works when watched or compelled (21) Average attendance record (22) No long absences (23) Not a member of any school societies (24 and 25) Says can't imagine what to change about schools (26) Criticism of school is lots of silly rules, petty things (27) Leaving school at 15 (28 and 29) Should be up to pupil whether to stay on, if no ability, not worth it (30 and 31) Parent reports does not like going to school now (32) Parent not entirely satisfied with school progress (33 and 34) Daughter herself is partly to blame. If she has no confidence in her teacher, loses heart completely (35) Parent does not wish her to stay after 15 (36) Intended and ideal job different (37) Total number of 261 words on Parental Questionnaire (38) Not a member of any club or group (39 and 40) Sometimes goes out with a friend, sometimes with a crowd (41 and 42) Parent states her to have many friends (43) Has a boyfriend but not a steady one (44) Encouraged to spend time away from home, if parents know where she is (45) See 18 (46) Temper outbursts and insolence (47) Aggressiveness, lack of concentration, daydreaming and truanting in the past. Current temper outbursts, insolence and unresponsiveness (48) No symptom reported as lasting more than two years (49) Tolerated and liked only by own set (50) Anxious to be in with the gang (51 and 52) Mostly sorts out own problems herself, but otherwise talks to mother and friends equally (53) Yes to daydreaming
Vivienne (Parkside)

Vivienne appears to have made an adjustment to school life which is unsatisfactory all round. She under-achieves on all three standardised tests. Her mother reports that she 'has always had difficulties with school work'. The teacher states that she 'only works when watched or compelled', while the girl herself tells us that she 'hated secondary school'. Her social relationships are equally unsatisfactory. She is only 'tolerated' and is 'anxious to be in with the gang'. The retrospective essay appears to show a need for attention.

Notes: The numbers in brackets are the column reference numbers.

(14) No public examinations (15) No prizes, certificates or awards
(16) No positions of responsibility (17) Has always had difficulties with school work (18) Has good and bad days: unreliable (19) Likes talking to teacher (20) Only works when watched or compelled (21) Irregular attendance (22) Has had long absences. Suffers from asthma. (23) Not a member of any school societies (24 and 25) Would like to reorganise schools. Thinks games should be changed. Girls do it if they want to (26) Enjoyed infant school but not so much junior school. Hated secondary school. (27) Left at 15 (28 and 29) Does not approve of principle of staying on after 15 (30 and 31) Parent states that girl did not like school (32) Parent was not entirely satisfied with school progress (33 and 34) Disagrees with school method, and not teaching spelling formally (35) Did not wish child to stay after 15 (36) Actual and ideal jcb not the same (37) Total number of 5 words on Parental questionnaire (38) Belongs to Y.W.C.A. Youth Club (39 and 40) Sometimes goes out by herself, sometimes with a crowd (41 and 42) Parent states has only one or two friends (43) No boyfriend (44) Encouraged to do things away from home (45) See 18 (46) Lack of concentration and daydreaming (47) Over timid in past. Current headaches and a poor eater (48) All symptoms have lasted more than two years (49) 'Tolerated' by other pupils (50) Likes to be centre of attraction, anxious to be in with gang, likes company of others (51 and 52) Discusses problems with mother and with friends (53) Yes to daydreaming

Robert (Parkside)

The loneliness which Robert describes in such detail in his
retrospective essay is the reverse side of the coin described by the teacher. Unless the matter is viewed in this light – two aspects of one state of affairs – the two accounts appear to contradict each other. The teacher states that Robert is 'very popular, adopted for himself the role of clown of the form, very good mixer, anxious to be in with the gang', etc. Robert's behaviour is distinguished from a normal, non-compulsive popularity by elements like 'anxious to be in with the gang'. (Also his mother's reports of temper outbursts, tension and headaches do not seem appropriate to 'the clown of the form'). He is probably purchasing his popularity, by an act which he has found to work, as a reassurance against fairly deep-seated fears of loneliness. Of particular relevance here is the fact that Robert's father is in a mental home.

Notes: The numbers in brackets are the column reference numbers.

(14) No public examinations (15) A book prize (unspecified)
(16) No positions of responsibility (17) Never has difficulties with school work (18) Constantly needs petty correction (19) Normal approach to teacher and likes talking about own family, etc. (20) Only works when watched or compelled (21) Good school attendance (22) No prolonged absence (23) No membership of school societies (24 and 25) Satisfied with schools as they are (26) Thinks school is not too bad, average (27) Leaving school at 15 (28 and 29) Does not really approve of staying on after 15 (30 and 31) Parent states likes going to school now (32) Parent satisfied with school progress (33 and 34) – (35) Parent does not wish him to stay after 15 (36) Had no ideal job (37) Total of 24 words on Parental Questionnaire (38) Not a member of any club or group (39 and 40) Sometimes goes out with a friend, sometimes with a crowd (41 and 42) Parent states has many friends (43) Has no girlfriend (44) Some encouragement to spend time away from home (45) See 18 (46) Lack of concentration and daydreaming (47) Parent reports temper outbursts, highly strung and headaches (48) No symptoms more than two years (49) Very popular. Had adopted for himself role of clown of the form (50) Very good mixer, easily led, likes to be centre of attraction, anxious to be in with the gang and likes company of others (51 and 52) Discusses problems with parents (53) Sometimes daydreams

Richard (Parkside)

Richard is a boy with a very low I.Q. (64), who is neverthe-
less making a very real effort to make good. He is in the school choir, for instance, and the teacher states that he 'tries very hard at school-work, is anxious to progress, often asks to stay behind for extra tuition'. However, some hint of the strain involved is seen in the boy's wish for 'longer holidays' and 'longer dinner hours' in schools. He is 'liked by other pupils'. It will be recalled that he was actually chosen as another boy's Ideal Person. Nevertheless, from the retrospective essay, it appears that Richard's prognosis for his life is not too cheerful. A final point is that Richard is a twin (and the much duller of the two). This fact, possibly by virtue of its non-mention in the essay, may be significant.

Notes: The numbers on brackets are the column reference numbers.

(14) No public examinations (15) No prizes, certificates or awards (16) No positions of responsibility (17) Has some difficulties with school work (18) Very well behaved in class (19) Likes talking to teacher. Pleasant and well mannered. (20) Tries very hard at school work. Anxious to progress. He often asks to stay behind for extra tuition (21) School attendance very good (22) No prolonged absences (23) Member of school choir (24 and 25) Would like to see longer holidays and longer dinner hours in schools (26) School is okay, depends (27) Leaving at 15 (28 and 29) Undecided whether principle of staying after 15 is good or not (30 and 31) Parent says child likes school (32) Parent not entirely satisfied with school progress (33 and 34) Not sufficient interest shown by teachers in lower form children (35) Parent does not favour staying after 15 (36) Intended and ideal job not the same (37) Total of 31 words on Parental Questionnaire (38) Member of a youth club (39 and 40) Likes to go out either alone or with two or three friends (41 and 42) Parent says has many friends (43) Has no girlfriend (44) Not encouraged to be away from home (45) Teacher reports no maladjustment symptoms (46) No symptoms reported under emotional behaviour (47) Parent reports lack of concentration (48) Symptom has lasted more than two years (49) Liked by other pupils (50) Friendly (51 and 52) Does "not really" daydream.

Norman (Parkside)

The picture here is of a rather withdrawn and more than averagely confused child, to judge from the retrospective essay - even granting that adolescence is a time of confusion for many. That his confusion or withdrawal goes rather beyond the normal is perhaps seen in the teacher's comment: 'general unresponsiveness and day-
dreaming'. The mother reports 'nervous mannerisms' for the past two years. He has 'always had difficulties with school work', but is 'liked by other pupils' although 'easily led'. The fact that Norman is likeable may, of course, enable him to get by, as he apparently has done up till now.

Notes: The numbers in brackets are the column reference numbers.

(14) No public examinations (15) Form prize in third year (16) No positions of responsibility (17) Always has difficulties with school work (18) Normal good behaviour. Unwilling and unable to accept responsibility (19) Never makes first approach to teacher. Likes talking if teacher talks first (20) Only works when watched in academic subjects, where much difficulty is encountered (21) Average school attendance (22) Away almost three months in first year with appendicitis (23) Not a member of any school societies (24 and 25) Close schools in fourth year. Learnt enough by 14 (26) School 'alright'. Not every day. Starts too early. (27) Leaving at 15 (28 and 29) Can't see any benefits in those who stay even up to 15 (30 and 31) Parent reports child likes school sometimes in some ways (32) Parent not entirely satisfied with school progress (33 and 34) No reason given (35) Don't want him to stay after 15 (36) Ideal and intended job not the same (37) Total of 10 words on Parental Questionnaire (38) Not a member of any club or group (39 and 40) Likes to go out with a crowd (41 and 42) Parent says has only one or two friends (43) No girlfriend (44) Parents encourage him to spend time away from home as long as they know what he is doing (45) See 18 (46) Teacher reports lack of concentration. General unresponsiveness and day-dreaming (47) Parent reports nervous mannerisms now (48) Have lasted more than two years (49) Liked by other pupils (50) Friendly, easily led and likes company of others (51 and 52) Discusses problems with mother (53) Often daydreams

General Comments

It is of interest that of the eight children selected for closer examination (on the basis of content and style of retrospective essay), one is without a father through bereavement, the father of a second deserted the home a year before and a third has a father in a mental home. There may, or may not, be similar domestic difficulties in the lives of some or all of the remainder, about which we have no information. It is also of interest, for instance, that phrases like 'tolerated', 'anxious to be in with the gang' occur so often in connection with these eight children. It is possible, therefore, that
a retrospective essay of this kind does have some value in detecting at least some of the deviant children in a population. Nevertheless, it would seem inadvisable to use the retrospective essay by itself: rather it should only be used in conjunction with other types of information. As an example of the dangers which would be likely to beset any over-enthusiastic embracement of such a projective task as a diagnostic tool, the essays of Patricia (Townsend) and Vivienne (Parkside) can be considered. They have many points in common - being bed-ridden with paralysis of the legs etc. - yet the two girls concerned would appear to have very different personalities.
Appendix B  Test Instructions and Copies of Questionnaires

The tests and measures listed here are in the order in which they were actually administered in the testing programme. This, however, does not apply in the case of the Confidential School Report and the Parental Questionnaire which, of course, did not require the presence of the children.

(1) Children’s Questionnaire (Section 5)

When you receive this paper write your name, school, class and today’s date on lines 1 and 2. Don’t write anything else at all.

(After distribution)
I shall go through this paper with you line by line.

3. Write in your birthday.

4. Give the term and year when you expect to leave, this summer or later.

5. Notice that this is to do with school. Underline YES or NC.

6. If you underlined NO leave this blank. If you underlined YES write what you received the prize etc. for. If there was more than one use one line for each. Opposite, under 'When received' write 'this year', 'last year', or 'earlier' according to when you had the prize.

7. By 'position of responsibility' we mean a job you’ve been appointed to, like captain, prefect, etc. Milk monitor for the class does not count.

8. If you underlined NO, leave this blank. If you underlined YES write what the position was. If there was more than one, use one line for each. Opposite, under 'When held', write 'this year', 'last year' or 'earlier' according to when you held the position.

9. If you are still holding any of these jobs go back to 8 and put X against them.

10. This includes all school subjects which you may do now or used to do but have stopped. Don’t put cricket for one and football for
the other though (or netball or tennis etc.) Use not more than one for games.

11. This can be for any reason. The papers will not be seen by the school authorities.

12 and 13 explain themselves.

Now quickly pass your papers to the front.

A copy of the actual questionnaire follows.

Questionnaire

1. Name............................ To-day's date............................

2. School............................ Class....................

3. Date of Birth....................

4. When do you expect to leave school ?............................

5. Have you ever won a prize, medal, or certificate, or similar award at school ?

Underline YES or NO

6. If the answer to the above is YES say what the award was for, and whether you received it within the last year or earlier.

   Awarded for
   ------------------
   ....................
   ....................
   ....................

   When received
   ------------------
   ....................
   ....................
   ....................

7. Have you ever held any positions of responsibility in your school ?

Underline YES or NO
8. If the answer to the above is YES say what the positions were, and whether you held them within the last year or earlier.

<table>
<thead>
<tr>
<th>Position</th>
<th>When held</th>
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<tbody>
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</tr>
</tbody>
</table>

9. Go back to question 8 and put X against any position you are holding now.

10. Which two subjects do you like best?

|          |           |

11. Which two subjects do you like least?

|          |           |

12. If you belong to any school clubs or societies, give their names:

|                                      |

13. If you belong to any clubs or societies not connected with school give their names:

|                                      |

2. N.F.E.R. Secondary Reading Test 2 (Section 3)

The method of administering this test and its duration (40 minutes) were as prescribed in the printed test instructions. Copies of the test may be obtained from the Test Agency, National Foundation for Educational Research, 79 Wimpole Street, London, W.1.

3. 'Ideal Person' Measure (Section 4:3)

Instructions:

What person whom you have ever known, or of whom you have ever heard or read, would you most wish to be like?
Give a list of the reasons which make you choose this person.

You have ten minutes.

4. Most Wicked Deeds (Section 4:4)

Instructions:

I want you to make a list of the most wicked things anyone could do.

You have ten minutes.

(At the end of ten minutes) I want you to look back at your list and number the six most wicked deeds in order of wickedness, putting 1 against the worst action, 2 against the next worst, 3 against the next worst and so on.

5. Retrospective Essay: Looking Back on my Life (Section 4:5)

Put your name, school, class and today's date at the top of the page.

I am going to ask you to do some writing for me, to write a story. It is the story that matters and not so much the spelling and writing. I want to be able to read the writing, of course, but don't spend time doing your best writing. If you come to a word that you can't spell don't ask me about it, make a guess at it.

I want you to imagine that you are a great deal older than you are now, and that you are towards the end of your life in fact. And I want you to look back from your old age; look back over your life and say what happened to you. Don't write a very exaggerated story, a fairy story, just tell the straightforward story of your life as it might really be. Of course you cannot know what is actually going to happen to you, but you can describe the sort of thing that could happen if things go as you hope. Spread your story over your whole life from the time of leaving school. Don't spend too long on any one part of your life.

These are the things to remember then:

1. Write the story of your life as you look back over it from towards its end.
2. Don't make a fairy story of it, write it as it might really be.

3. Write about the whole of your life from the time of leaving school up to old age.

You will have forty minutes to write your story. After thirty minutes I shall remind you of the time so that you can get your story finished right up to the end.

Has everyone understood what they have to do?

6. Graded Vernon Arithmetic-Mathematics Test (Section 3)

The method of administering this test and its duration (20 minutes) were as prescribed in the printed test instructions. Copies of the test may be obtained from the University of London Press Ltd., Warwick Square, London, E.C.4.

7. The Best Moment of My Life (Section 4:2)

Instructions:

Put your name, school, class and today's date at the top of the page.

I want you to do a little more writing. Since you won't have more than ten minutes you will not be able to write much. I don't expect your best writing but I'd like to be able to read it. If you don't know how to spell a word, guess at it, but don't ask. In your essay you wrote about your life as it might be in the future, but this time you have to write about something that has actually happened - I will tell you what in a moment. You should be truthful and write about something that has really happened to you. Remember that nobody who knows you will see your paper.

Has everyone understood?

The title on which I want you to write is 'The Best Moment of My Life'.

You have only ten minutes.
Individual Interview (Sections 5:1 and 5:2 and Appendix A)

Instructions:

I am going to ask you some questions about school, what sort of job you would like and what you do with your spare time.

There are no catch questions. We are just interested to know your opinions.

Please feel free to answer as fully as you wish. No one at school or at home will be told anything you say.

In the case of school leavers the tense of the questions was appropriately altered. The school leavers were also not asked questions 1, 3 and 6. Instead they were asked two questions: (1) What is your present job? (2) Have you had any other jobs since leaving school?

Otherwise the Individual Interview schedules for those who had already left school and those who were still at school were identical.

A copy of the Individual Interview schedule follows.

INDIVIDUAL INTERVIEW SCHEDULE

NAME ...................... D.O.B. .......................... CODE NO. ........
SCHOOL .................... CLASS ............... INTERVIEWER ............
Today's Date ............. No. of brothers ........ No. of sisters .......

JOB
1. Have you decided what you would like to do when you leave school?
2. If you could have any job you wanted and didn't have to worry about money or anything else, what would you choose to do?
3. What in fact do you think will be your first job?
4. What gave you the idea of going in for that job?
5. Who gave you the idea of going in for that job?
6. If answer to 3, 4, 5 negative: Haven't you any idea of what you will do when you leave school?

7. Have you had any training at school for this particular job?

SCHOOL

1. When will you be leaving school?
   If staying on after 15:
   Why are you staying on?
   Who encouraged you to stay on?

2. Do you want to leave school in the summer?
   Why?

3. What subjects do you like most?

4. What subjects do you like least?

5. Are there any other subjects you would like to be taught?
   What are they?
   Why would you like them?

6. How do you like school?

7. Is there regular homework?
   How much?

8. Are there school visits?
   Where to?
   How often?

9. Some people think that everything you learn at school will be useful later on. Other people don't think so. What do you think will be of most use when you have left school?

10. Is there anything else?

11. What will you miss most when you have left?
12. If you were the Minister of Education would you want to change anything about schools?

What?

13. Suppose that a different way of organising schools was used so that young people stayed at the same school from 7 to 13 years. They would then leave to go to a new school where they would receive one or two years' training for the job they want to do. What do you think of this idea? Would you rather stay at one school doing general lessons and activities until 13 and then change to a different school to learn a job?

Or do you think it is better as it is now, changing schools at 11?

Why?

14. In future young people are going to stay at school till they are 16. Do you think this is a good idea?

Why?

15. If you were a teacher how would you plan the five years that young people spend at their secondary schools before they leave at 16?

Would you have the programme similar to what it is now?

If different, how would you change it?

16. Have there been any talks in school about jobs when you leave?

17. If YES, who has talked to you about jobs?

GENERAL REMARKS

PRIMARY SCHOOL

1. What do you remember about your primary school?

buildings
friends
games
lessons
teachers
anything else
2. What did you enjoy most there?

3. Was there anything you didn't like about it?

4. Have you found that what you did there has been helpful at this school?
   Why?

5. What did you think about changing schools?

LEISURE

1. Have you any spare-time jobs?
   What do you do?

2. Are you given any pocket money?
   How much?

3. How do you spend any money you have?
   books
   cinema
   clubs
   clothes
   records
   sports
   Are you saving up for anything?

4. How do you spend your spare time?
   Do you have a regular evening for something particular?
   If YES, what?
   If Club, what do you do there?

5. What do you usually do if you stay at home?
   radio
   T.V.
   What are your favourite programmes?
   play instrument
reading

What do you read?

records
sewing
what else?

6. If you go out do you like to go on your own, with a friend or with a crowd?

Boy friend? Girl friend?

7. What do you usually do if you go out?

bingo
cinema
coffee bars
dancing
games which?
sports which?
theatre
walking
youth clubs

What about winter time?

8. Do your parents expect you in by a certain time?

What time?

9. Do you have a set bedtime?

Do you go to bed when you feel like it?

10. Many people of your age find it easier to talk about their problems to friends rather than to their parents. What do you find?

Why?

11. What do you usually do at weekends?

12. Do you ever spend a weekend away from home?

camping
cycling
walking
Y.H.A.
with relatives
If YES, do you go with a friend or with an older brother or sister?

If NO, would you like to?

13. Do your parents encourage you to do things away from home or outside your family circle?

What?

14. What do you think of the facilities where you live for outside, social and spare-time activities?

What are they?

Would you like any others?

If YES, what?

15. Many people have day-dreams about themselves. For instance, they may imagine themselves doing some very big things, or being famous for something, or owning some special thing. Do you have day-dreams of this sort at all?

Give examples.

16. Do you think any of these dreams are likely to come true?

Which?

17. Are there any questions you'd like to ask me?

9. WISC Vocabulary Sub-test (Section 3)

The method of administering this test and its duration (20 minutes) were as prescribed in the printed test instructions. Copies of the test may be obtained from the Psychological Corporation, 304 East 45th Street, New York 17, N.Y.

Confidential School Report (Section 5:1 and Appendix A)

This was completed in some cases by the Headmaster, in some cases by the teacher.

A copy of the Confidential School Report follows.
CONFIDENTIAL SCHOOL REPORT

FULL NAME.................................. DATE OF BIRTH..........................

ADDRESS..........................................................

NAME AND ADDRESS OF SCHOOL.................................

In which stream is the pupil?.........................

How many streams are there for pupil's age group? .........

1. ABILITIES AND ATTAINMENTS - Please tick in the appropriate box

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<th>Average</th>
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<td>COMMON SENSE</td>
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<td>GENERAL KNOWLEDGE</td>
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<td>READING</td>
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<td>MATHEMATICS</td>
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2. PERFORMANCE IN OTHER SCHOOL ACTIVITIES

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<td>PRACTICAL SUBJECTS</td>
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<td>DRAMA</td>
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Comments on outstanding strengths or weaknesses would be helpful.

3. SCHOOL ACTIVITIES - Please list any societies in which the pupil is or has been active in the past. Please state if he or she has played a leading part.

4. HOBBIES AND INTERESTS - Please give any information available on these.

N.B. with reference to Sections 1 and 2 will you please judge each pupil's position in relation to his or her age group.

5. SOCIAL BEHAVIOUR - More than one item in each section might apply. Please tick the relevant items.

In Classroom
(a) very well-behaved .......
(b) over-timid ........
(c) lifeless and apathetic ........
(d) constantly needs petty correction ........
(c) plausible, sly ........ (i) unwilling to accept responsibility ........
(f) tends to be troublesome when unsupervised ........ (j) unable to accept responsibility ........
(g) has good and bad days ........ (k) unreliable ........
(h) normal good behaviour ........

Talking to Teacher
(a) Likes talking about own doings, family or possessions ........
(b) Never makes any first approach ........
(c) Chats only when alone with teacher ........
(d) Never speaks to teacher ........
(e) Normal ........

Attitude to School Work
(a) Absorbed in work ........
(b) Tries very hard ........
(c) Very interested ........
(d) Normally interested ........
(e) Only worked when watched or compelled ........

COMPANIONSHIP
(a) Very good mixer ........ (e) Anxious to be in with gang ........
(b) Easily led ........ (f) Protective to other children ........
(c) Distant, wanders off alone ........ (g) Friendly ........
(d) Likes to be centre of attraction ........
(h) Associates only with one other and ignores the rest

(i) Often on bad terms with others

Attitude of other pupils

(a) Liked
(b) Ignored
(c) Disliked
(d) Very popular
(e) Tolerated
(f) Liked only by own set

Responsibilities in the Class or School - Please indicate the nature of any responsibilities the pupil has undertaken in the past or is undertaking at present.

6. EMOTIONAL BEHAVIOUR - Please tick if pupil shows any problem behaviour mentioned below. Add explanatory notes where necessary.

(a) Unduly aggressive
(b) Lack of concentration
(c) Pilfering
(d) Temper out-bursts
(e) Insolence
(f) Over-timidity
(g) Destructiveness
(h) Solitariness

(i) Nervous mannerisms
(j) General unresponsiveness
(k) Nail biting
(l) Day-dreaming
(m) Truanting
(n) Stammering
(o) Highly-strung

7. EDUCATIONAL HISTORY

(i) Attendance - Please tick:

Very good...... Good ...... Average...... Irregular ......

Very irregular ......
Has the pupil had any prolonged absences? .......

If possible, please give details and reasons.

8. EXAMINATIONS AND PRE-VOCATIONAL COURSES

(a) Is the pupil preparing for any examinations? .......

If so, please state them

(b) Has the pupil taken any examinations already, e.g. music, shorthand, etc.?

Please state the level reached

(c) Is the pupil taking a pre-vocational course?

If so, state which.

9. EMPLOYMENT OR CAREER - Please give any information available on this.

10. FAMILY CIRCUMSTANCES

(i) State briefly what is known of the pupil's home circumstances.

(ii) What degree of co-operation exists between parents and school?

11. GENERAL REPORT

Please give any additional information you consider relevant

Date........................ SIGNATURE........................

Parental Questionnaire (Section 5:1 and Appendix A)

This questionnaire was sent to the mother of the child for completion.

A copy of the questionnaire follows (The same questionnaire was used for girls and boys, but with the appropriate person changes)

Note: In addition to the above tests and measures the I.Q.'s obtained on the Cornwell Group Test of Intelligence at the age of 11 years are used throughout the report as the index of measured intelligence. Copies of the Cornwell test may be obtained from the Test Agency, National Foundation for Educational Research, 79 Wimpole Street, London, W.1.
Parental Questionnaire

NAME OF DAUGHTER ..................................  CODE NO. ...............

There are no right or wrong answers to any of these questions. Your answers will not be seen by anyone at your daughter's school or in the Education Office. Only I myself will see your replies. Please TICK the answers which apply to your daughter.

1. Has your daughter had any serious illnesses during the past five years?
   Please state which and how long each lasted.

2. Would you describe her general health now as
   very good;  good;  average;  poor;  very poor.

3. Does she like going to school now?  YES/NO

4. Have you ever had any difficulty in getting her to go to school?
   Never  Very occasionally  Quite often

5. If there has been this difficulty, please state its nature.

6. Are you satisfied with her school progress?
   Yes  Not entirely  Not at all  Don't really know

7. If you are not satisfied, please say why not.

8. Do you wish your daughter to continue at school beyond 15 years of age?  YES/NO

9. Do you think that at school she is: very slow for her age; slow; average; fairly quick; very quick for her age

10. Does she make friends easily?  YES/NO

11. Has she: many friends; one or two only; none at all.

12. Do you believe T.V. is: harmful for children; helps their general knowledge; helps them to learn to concentrate; is neither good nor harmful.
13. How many other children have you? ...... boys ...... girls

14. What are their ages?

15. Has your daughter ever had any difficulties with her school work?
   Never; from time to time; always; don't really know.

16. Does she have difficulties now? YES/NO

17. If yes, what does she find difficult?

18. All children show some difficult behaviour at some time during their growing-up. If your daughter has now or has had in the past five years one or more of the problems listed below, please TICK whichever applies.

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<td>Over-excitable</td>
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<td>Truanting</td>
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19. Has she shown any of the above difficulties for more than two years? YES/NO

20. If yes, please state which difficulty and at what age it was shown.

21. When your daughter's behaviour gives you concern, to whom do you
turn for advice?

Your husband; your own mother; other relatives; friends;
your family doctor; the Headteacher; books or women's journals.

IF YOU DO NOT WISH TO ANSWER THE NEXT TWO QUESTIONS PLEASE LEAVE THEM BLANK

22. What is your husband's occupation?

23. If you work yourself, what is your own occupation?
   Do you work full-time or part-time?

Date................ Signature..........................
Bibliography


PRINGLE, M.L. Kellmer and GOOCH, S. (1965a) My Ideal Person - a follow-up of an earlier study (in preparation)


VENESS, T. (1962) School leavers, Methuen & Co. Ltd., London,