

**FAMILIAL AND SOCIOLOGICAL CORRELATES OF BEHAVIOURAL
AND SOCIOMETRIC DEVIANCE IN 8 YEAR-OLD CHILDREN**

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Introduction

A child must make a number of major adjustments at school. In this paper we focus on the formal educational and academic demands (where failure leads to educational handicap); the demands of emotional adjustment and behavioural control (where failure leads to emotional handicap); and, merging with both the others, the demands of social relationships with peers. Signs of failure in any of these areas would constitute evidence of psychological vulnerability and failings in one area could have repercussions in the others. We concluded that a single screen measure was inadequate for identifying psychologically vulnerable children, and that the multi-screen model of Bower (1969) was more appropriate. We scanned the literature for screen measures which were likely to be reliable, valid and reasonably efficient predictors of disorder. The criteria which we eventually chose were entirely school based and included measures of classroom behaviour, sociometric status, reading ability and attendance at school.

In this paper we examine the correlation between each of a number of school based criteria of deficit or deviance,

and factors obtained by gathering information from parents - family and social data, the mother's perception of the child's reaction to school, parental techniques of management or discipline, and reports of the child's behaviour at home.

Relevant Review of the Literature

In large populations, screening calls for rapid, reliable techniques (Zax et al., 1964; Cowen et al., 1971). The teacher is a key source of information, but other sources should not be ignored. In the United States, Rogers (1942), Ullman (1952), Bower (1969), Cowen et al., (1964) and other workers have studied the use of multiple criterion screens. Indeed, Rogers used a nine-criterion screen. Few workers in the United Kingdom have been interested in this approach, although Rutter and colleagues (Rutter et al., 1970; 1975) have used a parent and teacher screen, and others have compared pupil and teacher ratings (Hallworth and Morrison 1964; Roff et al., 1972).

The techniques used in such screening have commonly involved the selection of individuals who have statistically extreme scores on the measures in question. There is plenty of evidence to suggest that such deviance has predictive utility. For example, ratings by teachers have often proved to be predictive of later delinquency (Mulligan et al., 1963; Khelif, 1964), and so have sociometric indices (Harper, 1965; Skaberne et al., 1965). In a recent longitudinal study of 4,000 children, Roff, Sells and Golden (1972) found that middle class delinquents are earlier rejected by their peers while working class delinquents may have been either rejected or popular. Sociometric ratings of disorderly behaviour in primary school have been found to correlate 0.50 with secondary school teachers' later ratings of indiscipline (Gibson and Hansen, 1969), and may be more predictive of academic

achievement or withdrawal from school than self-rating personality tests (Ullman, 1957). Inadequate personal adjustment may also be foreshadowed by earlier peer difficulties. Thus, unpopular children are more likely to be disproportionately represented later in life in a community-wide psychiatric register (Cowen et al., 1973). Amongst the indicators identified in the Austin Longitudinal Research Project (Currie et al., 1974) as precursors of inadequate personal adjustment some nine years later, rejection by peers in the first grade has been one of the most useful.

There is much evidence that children identified in schools as showing an excess of behaviour problems (Rutter et al., 1970; 1975), having poor educational attainments (Rutter et al., 1970, 1975; Douglas et al., 1968) or having problems of interpersonal relationships (Roff et al., 1972) show a degree of correspondence between these behaviours and social and family pathology, deviant family attitudes and deviant child behaviour as reported by the family. Most relevant for our research is the study of adjustment in two geographical areas (Rutter et al., 1975). They identified family discord, parental deviance and social disadvantage which were associated with child disorder at parental interview and child deviance on teacher questionnaire.

In companion papers (Kolvin et al., 1976; 1977; Macmillan et al., 1977) we have reported on a research programme of screening junior school children for psychological vulnerability in terms of high risk for emotional, inter-personal and educational difficulties. The multiple criterion screen employed will be more fully described in the method section. Using extreme scores as indicators of vulnerability our multiple criterion screen yielded about a third of the total population but the yield varied from school to school. Approximately 17% of the children

were identified on the basis of the behavioural criterion; 12% by the reading criterion; 9% by the isolation criterion; 8% by the rejection criterion and 3% by the absenteeism criterion (Fig. 1).

Percentage of total population identified by each screen criterion. Shaded area represents percentage selected only by that criterion.

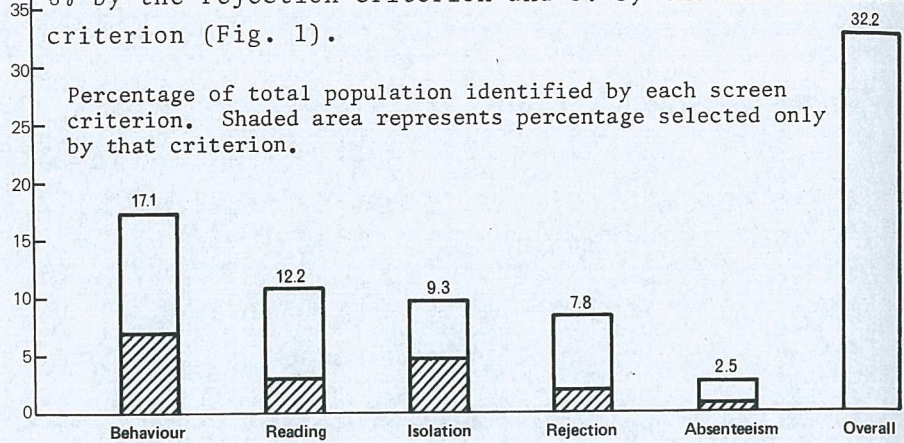


Fig. 1

Absenteeism identified the smallest percentage of cases, and made the smallest independent contribution to identification. Isolation was not impressively related to neurotic or antisocial behaviour as rated by teachers. Inevitably some cases were identified by a single criterion and others by more than one. The overlap that occurred is described in the companion papers.

Method

The Population

In our main study, involving 6 Junior Schools, we screened 515 first year junior school children with a mean age of 7 years 9 months. There were almost equal numbers of boys and girls (52.2% and 47.8% respectively). The schools chosen were broadly representative of the schools in this area: the social class distribution of the families was slightly below the national average (Neligan et al., 1974).

The normal controls subsequently were selected at random from the pool of children not identified by any

screen criterion, with the proviso that they be drawn from all six schools, and that they reflect the sex ratio in the "vulnerability" group, which was found to be 3 boys to 2 girls.

The Multiple Criterion Screen

The five criteria used were as follows:

Sociometry

Each child in a class was asked to complete a form which asked him to choose which three of his classmates he would like to sit beside in class and to play with at play-time, and conversely, which he would not like to sit beside or play with. This procedure yielded two scores: *isolation*, which is defined as a lack of positive choices; and *rejection*, which is defined as receipt of a large number of negative choices. In a class of approximately 30 children, the child was considered to be isolated if he scored 0 or 1 positive choices, and to be rejected if he received 14 or more negative choices. Each of these cut-off scores was intended to yield about 6% of the population, judged by the findings from a previous pilot study but in practice we found that the yield was higher. The sociometric criteria are described more fully elsewhere (Macmillan et al., 1976).

Reading

In the Isle of Wight Study (Rutter et al., 1970), the definition of educational backwardness was a reading accuracy or comprehension 20 months below the child's chronological age, and this included 7.9% of the population. Some of the children in our study (i.e. those who were just seven years old) were too young for a similar definition to be used with any degree of confidence, so we selected a cut-off of a reading quotient (R.Q.) of 75 or

less on the Young (1968) Group Reading Test. This meant that, at this age, the selected children were non-readers on this test. We appreciated that this would produce a higher yield than the Isle of Wight Study, but we considered this to be justified in view of the greater degree of economic deprivation in the North East. In fact it leads to an inclusion of 12.2% of the population. Due to illness or absenteeism we only managed to administer the reading test to 512 of the children during the screening period.

Behaviour - The Rutter Teacher Scale B

(Rutter 1967) and Rutter et al., (1970), found that a cut-off of 9 or more had discriminative value. It selected about 10% of the boys and 4% of the girls in the general population, which, if there are almost equal numbers of boys and girls, averages about 7%. This cut-off produced nearly 30% of children in our pilot study, and over 20% of the children studied overall. We decided therefore to use a slightly more rigorous criterion, and raised the cut-off to 10. At this level, 17.1% of the population was included, more than double the rate found on the Isle of Wight. The percentage of cases selected is set out in Fig. 1.

Absenteeism

The Rutter Teacher Scale B contains the item 'Tends to be absent from school for trivial reasons'. We decided that any child who qualified for a clear-out affirmative answer to this question, should be included in the "vulnerability" category. We found that 90.5% of the children were rated as 'does not apply', 6.9% were rated as 'applies somewhat', and 2.5% of the children were rated as 'certainly applies'.

Reliability

The Rutter Teacher Scale B already has been shown to have adequate reliability of 0.72 between raters, and a retest reliability using the same teacher, of 0.89. The reliability of the absentee item of the teacher scale is likely to be less than this, as on any scale the constituent items are usually less reliable than the score based on a summation of the items, but reliability is assumed because of the continued inclusion of the item in the scale. The Young Reading Test has been shown to have a reliability of 0.95 (Young 1968). For sociometric criteria, we found that the test-retest reliability with a one-month gap was 0.88 for *rejection* and 0.63 for *isolation*.

The Fieldwork

As we have described elsewhere the fieldwork required in screening proved not to be a major burden being completed under the supervision of one psychologist in four weeks (Kolvin et al., 1976).

Other Data

Family and Social Data

Mother's Working This was recorded in three categories of not working, working part-time or working full-time. However, for the purposes of this analysis the data were grouped according to whether the mother worked or not at the time of the interview.

Occupational Class The occupation class of the breadwinners was recorded using the Registrar General's Classification with the customary categories ranging from I to V. In our figure we present our data in terms of percentage of breadwinners who were semi-skilled or unskilled (IV and V).

Family in Contact with Social Services This was defined as voluntary or compulsory contact with the probation

services, social services, Family Service Unit, or National Society for Prevention of Cruelty to Children etc.

Large Families We arbitrarily decided on a cut-off of 6 or more children to represent large families.

Percent of Families with High Social Problem Score (4+) This consists of the summation of a number of defined, possibly adverse, social and family experiences. Each experience, such as poor work record of father or separation of parents, was weighted equally and summed.

Mother's "Neighbourliness" Score The mother's 'neighbourliness' was a measure of her sociability towards her neighbours, and was based on the answers she gave to a twelve item questionnaire at interview with a social interviewer (Wallin, 1954).

Mother's Mental State The General Health Questionnaire developed by Goldberg (1972) was used. The version used was the 30 item questionnaire which, though brief, has adequate reliability and validity. The questionnaire was developed to detect respondents with affective neuroses i.e. minor depressions and anxiety states and is particularly helpful in revealing those with 'hidden psychiatric illness'. While a higher score indicates higher probability that there is a psychiatric problem, it does not provide a diagnosis. Goldberg sees it as being particularly useful for comparing non-psychotic, psychiatric disturbance in two populations by comparing the means and standard deviations of their scores.

Mother's Perception of Child's Reaction to School

Information about parent's perception of the child's reaction to school was obtained during the semi-structured open ended interview.

Child Liking School Ratings were made on a five point scale, with only three of the points defined, i.e. the two ends and the middle - the extremes of the scale range

from 'likes very much' to 'dislikes'.

Child Having School Problems The same principles were employed here and the range extends from 'no known problems' to 'definite problems'.

Parental Techniques of Management or Discipline

A semi-structured open-ended interviewing technique was similarly used to obtain information on 3 areas of management or discipline.

Deprivation of Privileges This was rated on a five point scale with the extremes ranging from 'rarely or never used' right through to 'very frequent and extensive use'.

Physical Punishment This examined the extent of use of physical punishment. Introductory questions were provided and a definition of physical punishment was also supplied. Every point of the five point scale was defined - from occasional slapping of hands at one extreme to frequent spanking at the other.

Reasoning Here we were interested in the extent of use of reasoning by parents. Again we used a 5 point scale which at the extremes was defined as - "always use reasoning" at one extreme to "clear evidence that reasoning is rarely or never used" at the other.

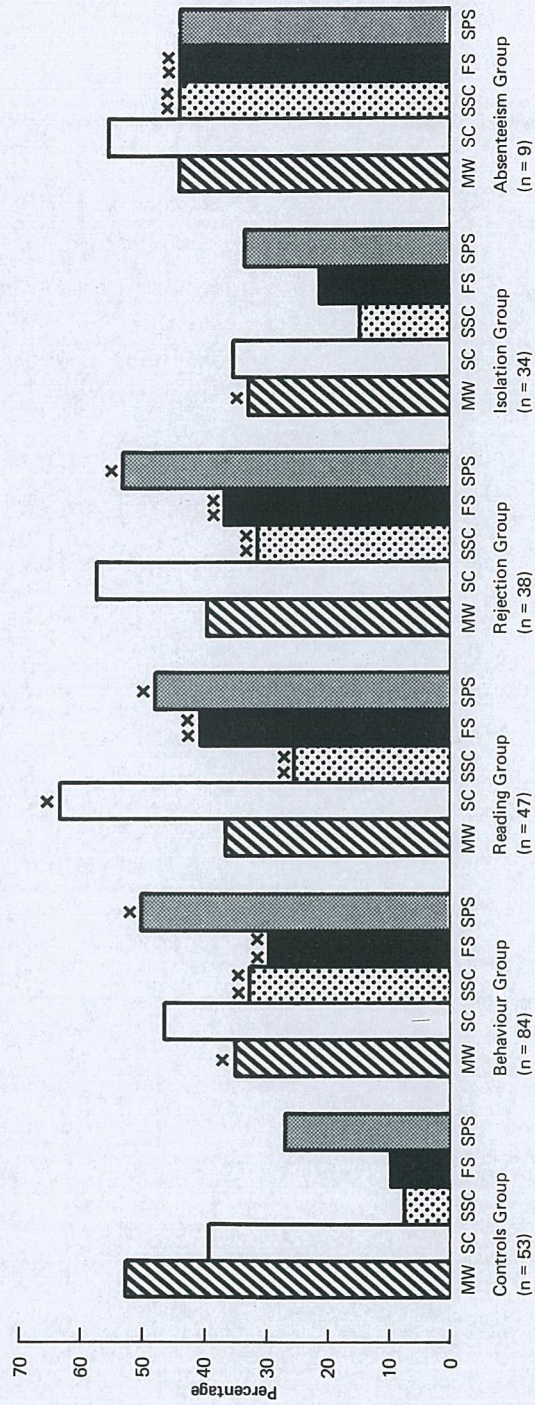
Parental Reports of Child Behaviour (Rutter A Scale)

We used the children's questionnaire for completion by parents developed by Rutter et al., (1970). This provides three scales - total score, neurotic subscore and an antisocial subscore. It has adequate reliability and the best discrimination between clinic and non-clinic children was obtained with a cut-off total score of 13.

Presentation of Data

For presentation purposes we have dichotomized the data as follows:- child liking school at point 5 on the

Histogram of Criterion Groups and Control Groups
FAMILY AND SOCIAL VARIABLES. PERCENT OF EACH GROUP WITH ADVERSE SCORES



MW = Percent of Mothers Working
 SC = Percent of Breadwinners who are Semiskilled or Unskilled
 SSC = Percent of families who have been in contact with the Social Services
 FS = Percent with family size of six or more
 SPS = Percent of families with high social problem score (4+)
 X = Significantly different from controls at 5% level
 XX = Significantly different from controls at 1% level

Figure 2

scale, that is, "likes very much"; child having school problems at point 1 on the scale, that is, "no known problems"; deprivation of privileges at the mid point on the scale; physical punishment according to whether it was fairly frequently used or not; and reasoning according to whether it was frequently used or not.

Comparisons Between Groups

The five groups of children identified by each of the five screen measures were compared with a mutually exclusive control group on each of the home and family criteria. This permitted the validity of the screen measures to be compared one with another in these respects.

Findings

The Behaviour Criterion (In School)

The groups of children identified by this criterion differ from the controls in having a significant excess of social problems, as exemplified by their coming from families having been in contact with the social services, having high social problem scores and coming from families with six or more children (Fig. 2). As is to be expected from these findings, this group has an excess of breadwinners who are semiskilled or unskilled although this is not a significant difference. It is interesting to note that there are significantly fewer mothers working in this group than in the control group and this possibly reflects, amongst other explanations, poorer social and domestic competence.

From their description it is evident that these parents appreciate that their children have more school problems - over 40% are reported as having problems (Fig. 3) compared to under 10% in the Control Group ($p < .01$). Furthermore, these parents rate their children on the Rutter A Scale as having significantly more problems of

behaviour than the controls (Fig. 4) in terms of total behaviour ($p < 0.01$), antisocial behaviour ($p < 0.01$) and neurotic behaviour ($p < 0.05$).

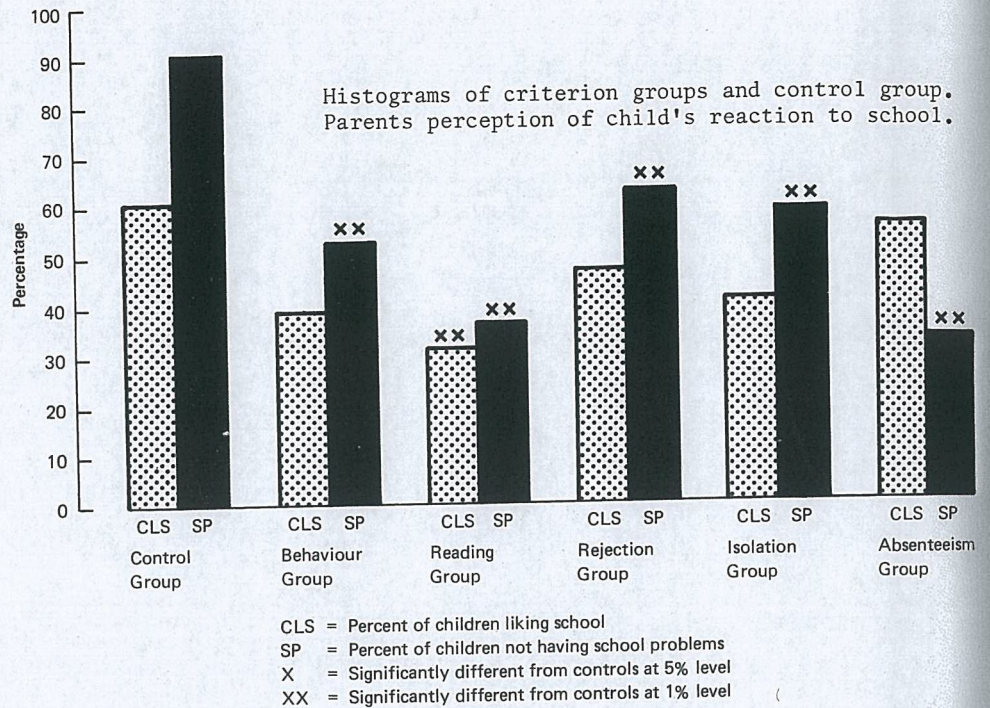


Fig. 3

Parental management (Fig. 5) too is different - the parents use both deprivation of privileges and physical punishment more frequently ($p < 0.05$) and reasoning less frequently ($p < 0.05$) than the controls. It is not clear whether these patterns of management are determined by the child's behaviour or are customary ways of handling children in such families, irrespective of the child's behaviour.

Table 1 emphasises the fact that the mean size of the sibship is greater than the controls but there are no evident differences of ordinal position. Table 2 emphasises

TABLE 1
Criterion Groups Compared with Control Group

	Sibship and Ordinal Position					
	Control Group h=53	Behaviour Group h=84	Reading Group h=47	Rejection Group h=38	Isolation Group h=34	Absenteeism Group h=9
Sibship Mean	3.45	4.33**	4.96**	4.6**	3.6	4.8*
SD	1.72	2.04	1.94	2.2	1.9	1.9
Ordinal Position						
First	28.3%	25%	17*	23.7%	44.1%	22.2%
Fifth	5.7%	9.5%	17%	10.5%	11.8%	11.2%
Six or more	3.8%	13.1%	19.1%	15.8%	11.8%	22.2%

Legend * significant at 5% level; ** significant at 1% level

a trend of the mothers of this group to be less sociable than the controls. However, even more important is the fact that the mothers report significantly more personal psychiatric symptoms than do the controls ($p < 0.05$).

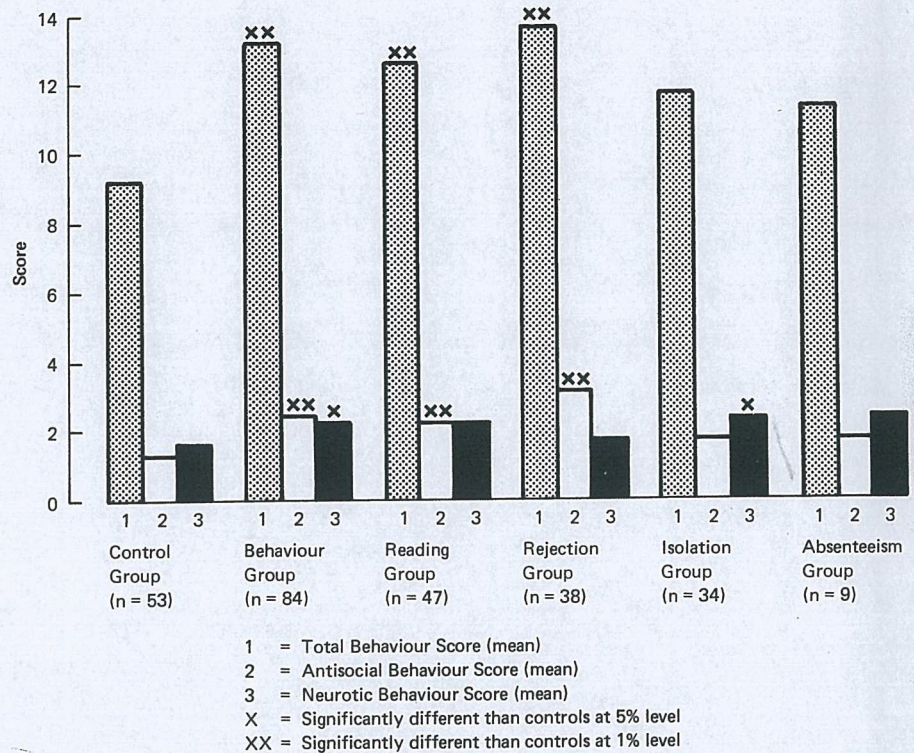


Fig. 4 Histograms of criterion groups and control group. Information about behaviour obtained from parents.

We therefore have evidence that the parents of this group have both an excess of social and psychiatric problems and poorer social and domestic competence than do the controls. It is therefore tempting to speculate that the excess of parental problems is one of the main determinants of the disturbed behaviour of their children emerging both in the school and the home environment.

TABLE 2
Criterion Groups Compared With Control Groups

	Maternal Socialization and Maternal Mental State					
	Control Group	Behaviour Group	Reading Group	Rejection Group	Isolation Group	Absenteeism Group
Neighbourliness						
Mean Score	21.1	20	19.89	19.42*	18.97*	19.68
G.H.Q.	3.4	6.2*	6.1*	5.0	4.0	6.4
Mean Score						

Legend * significant at 5% level; ** significant at 1% level

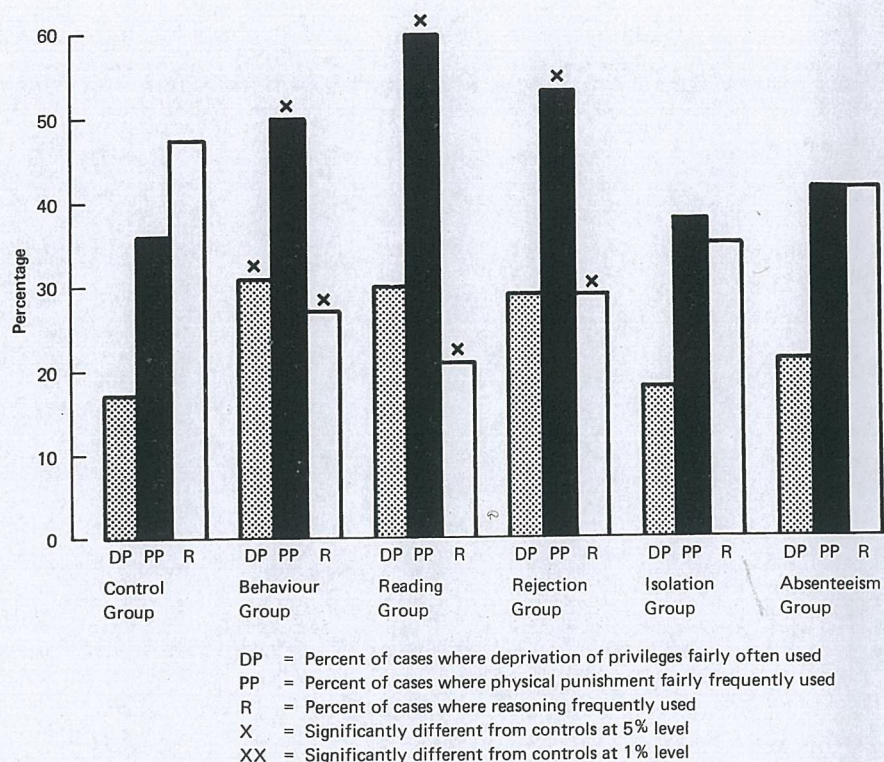


Fig. 5 Histograms of criterion groups and control group. Parent Management.

The Reading Criterion

This group too has families who have a significant excess of social problems as compared to the controls - more in contact with the social services; more with a high social problem score; more from very big sibships; and more breadwinners who are semiskilled or unskilled (Fig. 2).

In this group it is again found that the parents have considerable appreciation of the existence of school problems; over 60% of them stated that their children do not like school compared with over 30% in the controls; and over 60% regarded their children as having school problems as compared to under 10% of the controls (Fig. 3).

On the Rutter A Scale, the group as a whole has significantly higher mean scores in terms of total and antisocial but not neurotic behaviour than do the controls (Fig. 4). Finally, about 60% of the parents use physical punishment as against under 20% of the controls and, again, significantly less in the way of reasoning is used (Fig. 5).

Table 1 reveals that the mean size of the sibship in this group is very significantly greater in the control group. This is further emphasised by the fact that significantly less first-born children are involved than is the case with the controls. Table 2 also reveals a trend to poorer socialization of mothers plus a significant excess of personal psychiatric problems of these mothers.

In brief this group too is beset by excesses of social and psychiatric problems on behalf of the parents and again it is tempting to speculate that the poorer educational attainments and disturbed behaviour of the children is a reflection of such problems.

Rejection Group

Again there is a significant excess of social problems compared with the controls in terms of contact with social services, having a high social problem score, and a large family. While there are more families in the lower occupational classes, this does not achieve statistical significance (Fig. 2).

The parents regard nearly 40% of these children as having school problems compared with under 10% of the controls (Fig. 3), and rate these children as having significantly higher total and antisocial behaviour scores on the Rutter A Scale than the controls (Fig. 4).

Again, significantly higher percentages of these parents use physical punishment and deprivation of privileges than in the control group (Fig. 5).

The data from Table 1 reveal that these children

came from much larger families than the controls ($p < 0.01$). These mothers, too, are significantly less sociable than the controls, but the excess of psychiatric disturbance does not reach levels of statistical significance. Again, this group is beset by excesses of social problems and we can again hypothesize that the rejection of the child is determined, in part, by the social pathology of the family.

Isolation Group

The significant differences from the controls are few - fewer mothers working (Fig. 2); a higher percentage of the children perceived as having school problems (Fig. 3); and an excess of neurotic behaviour on the Rutter A Scale (Fig. 4). However, there are no differences of management compared with the controls.

This is the only criterion group whose mean family size is not higher than the controls. Indeed, some 44% of this group are first-born compared with only 28% of the controls - but the difference falls short of statistical significance (Table 1). These mothers are also significantly less sociable than the controls but only show a trend to a higher G.H.Q. score than do the controls (Table 2).

It is interesting to note that children identified as not being popular have mothers with a significantly poorer sociability score than the controls. Further, over 40% of them are first-born children. It is also to be noted that a significantly higher proportion of their mothers do not work and we wonder if this reflects in part their social isolation. Indeed this suggests that lack of sociability on behalf of the mothers goes hand in hand with social isolation, on the child's part.

The Absenteeism Group

The data in relation to this group must be viewed

with caution as they are based on so few cases. The significant differences are few, but include an excess of social problems and large families, an excess of children perceived as having school problems, and finally the mean size of the sibship is higher than in the case of the controls. However, there is a trend to poor maternal 'sociability' and higher 'psychiatric' scores.

Number of Obtained Screen Criteria

Relationships with family and other data gathered from the parents were assessed as well in relation to the number of obtained screen criteria per child identified by the screen. In Table 3 the mean scores of family data for each of the criterion groups (i.e. 0,1,2,3) or more is given. It will be seen that, while there tends to be a stepwise increase of negative scores with increase in number of criteria by which the group is identified, the differences between the groups is only significant in 4 of the 9 variables selected for study i.e. family size, social problem score, parent sib social services contact and parents using less in the way of reasoning. Furthermore, a gradient was statistically proven in all 4 of these variables (tested for linearity). Coming to child reactions or behaviour (Table 4) as perceived or rated by the parents (on the Rutter Teacher Scale) the trends are always significant (F at $p < 0.05$) but linear for only 4 of the 5. We can therefore conclude that there is some evidence that the more criteria by which the child is identified the more there are increasingly high adverse social scores of family and background factors, especially in terms of how the parents perceive or rate their child's behaviour. Again, of the family data it is social problem scores which best distinguish the groups and in which there is a linear gradient of scores as one moves from no criteria to 3 or 4 criteria.

TABLE 3
Number of Obtained Screen Criteria and Family Data (Mean Score)

Variables	Controls Group	One Criterion group	Two Criteria group	Three or more Criteria group	'F' Test	Linear
Size of Group	(53)	(81)	(41)	(15)	-	-
A. Family size	3.54	4.20	4.5	4.7	5%	Yes
	S.D. 1.8	1.9	2.3	2.1		
B. Work state of Mother	1.74	1.58	1.44	1.27	NS	No
	S.D. 0.9	0.8	0.7	0.6		
C. Social Risk Score	1.5	1.75	2.20	2.40	5%	Yes
	S.D. 1.0	1.51	1.36	1.72		
D. Parent/Sib Social Services Contact	1.1	1.3	1.4	1.5	1%	Yes
E. Neighbourliness Score	21.1	20.1	19.4	19.4	NS	No
F. Mental State of Mother G.H.Q.	3.5	5.8	6.0	4.9	NS	No
G. Parent Management						
Physical Punishment	2.1	2.4	2.4	2.7	NS	No
Deprivation of Privileges	1.5	2.0	2.0	1.9	NS	No
Reasoning	2.0	2.4	2.3	2.9	5%	Yes

TABLE 4
Number of Obtained Screen Criteria and Child Data (Mean Scores)

Variable Name	Controls i.e. No Criterion Group	One Criterion Group	Two Criterion Group	Three or more Criterion Group	'F' Test	Linear
A. Child perceived by parent having school problems	1.2	1.6	1.7	1.9	1%	Yes
B. Child Likes School	3.9	3.2	3.6	2.3	1%	No
C. Parent Behaviour Questionnaire (Rutter A Scale)	9.2	11.6	13.2	14.3	1%	Yes
Total Score	1.4	2.0	2.2	3.2	1%	Yes
Rutter Antisocial	1.6	1.8	2.4	2.3	5%	Yes

Discussion

We have presented findings obtained in the school setting and related them to information obtained from parents.

Our sample is too small for a detailed study of items of environment and family functioning in relation to the child's adjustment at school. Furthermore, it is likely that many such items will be highly inter-related with each other and hence it was decided to concentrate on those features represented by composite scores rather than individual items. It also needs to be re-emphasized that the identified criterion groups are not mutually exclusive and therefore we have only compared each criterion group with the controls but not with each other. We will therefore be able only to note how the pattern of differences from the controls varies from group to group despite the overlap.

From Fig. 2, 3, 4 and Table 1 it will be seen that the pattern of *differences from the controls* is roughly similar for the behaviour, reading and rejection groups (though the differences from controls do not always achieve statistical significance). These cover a variety of data - social factors, child's behaviour, parents' perception of the child's reaction to school and parental techniques of management. However, when we come to maternal factors as depicted in Table 2, i.e. mothers' neighbourliness in the community or mothers' mental state, it is the behaviour and reading groups which differ significantly from the controls in relation to the latter feature, and the rejection and isolation group which differ significantly from the controls in relation to the former. We are therefore led to the conclusion that, while the pattern of differences from the controls of the behaviour, rejection and reading groups appear similar, the isolation group (i.e. who have extreme lack of popularity in terms of lack of positive choices but

not necessarily rejection) does not show this pattern.

Before we examine the pattern of differences of the rejection and isolation groups from the controls it is well worth while examining the nature of 'rejection' and 'isolation'. There is good evidence both from the literature (Roff et al., 1972; Gronlund 1959; and Justin and Wrightstone, 1951) and our own findings (Kolvin et al., 1977; Macmillan et al., 1977) that the positive sociometric choices are not simply the inverse of negative choices. Correlations as high as 0.50 have been reported but in the present study it is 0.25 (Macmillan et al., 1977). Lack of positive choices by an individual child may just reflect low interest or lack of awareness of their 'existence' by other children, and not necessarily dislike. We are therefore confronted with the question as to whether to regard th as two separate concepts or a single one. Roff et al., (1972) have opted for the latter and have sought ways of developing a single continuum of acceptance and rejection "which shows each child's place with respect to his classmates". Their formula consists of combining scores of a number of positive choices minus the number of negative choices for this purpose.

For this reason the Roff study appears to be the best with which to compare our data and deserves more extensive comment. It provides some useful guides but the value of the findings is diminished because most of the research does not completely satisfy the principle of seeking criteria external to or independent of the source of the sociometric measures to be validated. Most of the validating findings reported by them are based on information derived from other school personnel who had no knowledge of the peer choices. However, such a design is fraught with many possibilities of contamination. For instance, there is good reason to believe that the sociometric response to other children is in part determined by the teacher's

demonstrable reactions to these children (Flanders and Havumaki, 1960; Medinus, 1962) and that the reaction is influenced in part by what is known about the family and social environment (Smith, 1965; Friedman and Friedman 1973). Furthermore, even in that part of the Roff research where information is directly obtained from parents, the correlations are artificially inflated by the techniques used. These consist of the allocation of children into 3 sociometric categories of high, average or low status, and each category of family information is similarly classified into positive, neutral or negative. They then use the ends (i.e. high and low choice status cases) but exclude the middle (i.e. average status cases) in computing their correlation coefficients. Roff et al., acknowledge that this technique leads to inflation of correlations (almost two-fold) as compared with those reported elsewhere in the literature.

Returning to our own findings, the patterns of differences found between the rejection and control groups in terms of social and family backgrounds are all in predictable directions, and are similar to the correspondence reported by Roff for his peer-acceptance - rejection continuum and social and family factors. However, the patterns of differences for the rejection group as compared to the controls are in the main dissimilar to that found with the isolation group. The cluster of differences that do occur with the latter group seem to suggest that mothers of the 'isolates' are themselves isolated i.e. significantly fewer work despite there being no difference from the controls in terms of percentage of breadwinners who are semi-skilled or unskilled, and a significant percentage are more socially isolated than the controls. While they regard their children as having more school problems than the controls, (they report a significantly higher frequency of neurotic behaviour), these may merely reflect social

introversion in their children. One of the few factors of any consequence where the rejection and isolation groups are both significantly different from the controls, is the mother's social isolation. It would therefore appear that school-based isolation and rejection criteria select children whose pattern of differences from the controls, in terms of features as rated by independent sources is different. We have no independent evidence for widespread family and child disturbance of our 'isolation' group, except for the excess of child neuroticism as reported by mothers. This gives rise to the hypothesis that there is a heavy loading of family introversion in such cases but no real or substantial pathology. On the other hand there is not only evidence of maternal isolation but widespread child and family pathology in our rejection group. Thus, while the argument for seeing the isolation group as containing vulnerable children coming from vulnerable families is marginal, there are strong arguments for seeing the rejection group as containing vulnerable children coming from vulnerable families. We therefore consider that there is not a strong case for combining these two criteria into a single peer-acceptance-rejection continuum.

Finally, despite the small size of the sample and hence the need for caution in interpretation of such findings, it is evident that there are trends or actual significant differences between the controls and the 'absentee group' in terms of an excess of maternal psychiatric problems. This supports our previous contention that, although the absentee criterion identifies only a small number of cases, those identified constitute an important group of vulnerable children.

Summary

Some 500 seven to eight year-old children were screened with a battery of tests which include teachers' ratings of

behaviour, two measures of sociometric status (isolation and rejection), reading ability and attendance at school, in order to identify groups of vulnerable children. Information gathered from the parents of the groups of children picked up by each screen criterion, included family and social data, mother's perception of the child's reaction to school, parental management techniques and reports of the child's behaviour at home. This was compared with similar data available for a random control group of children not identified by the screen.

The pattern of differences between the controls and each of the groups of children identified by behaviour ratings, reading and socio-metric rejection criteria tended to be similar, as each of these groups showed a significant excess of social and family background problems. Divergences from the control group observed for children in the sociometric isolation group are less impressive.

The comparisons for children in the absenteeism group point to similar differences, but are based on only a small number of cases. Finally, there is evidence that the more screen criteria by which a child is identified, the more there are adverse social and family factors.

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