A FACTOR ANALYSIS OF SOME CHILD PSYCHIATRIC CLINIC DATA*

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INTRODUCTION

THE Underwood Report (12) drew attention to the need for some system of classification in child psychiatry. This paper presents the results of a statistical study which was undertaken as relevant to that general enquiry.

In this Department an "Item Sheet" is routinely completed by the psychiatric registrar concerned in respect of each patient. The Sheet contains some 150 items, to be ticked as appropriate, which cover a wide range of possible features in a child's environment, history, personality and psychological and physical condition. (Further information regarding this Item Sheet is given elsewhere (4).) It was decided to submit the Item Sheets of a number of children to a principal component analysis to discover whether there were any major components inherent in the intercorrelation of the items.

THE SAMPLE

To favour the possibility of a meaningful outcome, a certain homogeneity in the children forming any sample so analysed seemed desirable. Accordingly, a delimited age-range was used; children between their eighth and tenth birthdays at the time of referral to the hospital were selected for the study here reported. This age-range was chosen as representative of middle childhood; the aim was to examine a group clearly differentiated from adolescents on the one hand, and distinct also from the youngest ages of referral on the other. These other groups are being submitted to a similar study to be reported later (5, 6). The sexes were also considered separately. Further, in pursuance of homogeneity, all children regarded as epileptic, psychotic, or intellectually very dull (i.e., I.Q. below 69) were eliminated from the sample. Apart from these limits, all available completed records of children referred to the hospital during an eight-year period, from October, 1951 to September, 1959, were used.

Thus, in summary, we came to form two groups for the present study: 268 boys and 98 girls (these totals reflecting the differential referral rate as between the sexes at this age). All were at least eight years but not yet ten years (within a month of accuracy at either end of this range); and they attended the clinic for the whole range of child psychiatric problems, save epilepsy, mental deficiency, and psychotic disorder.

THE VARIABLES

Having isolated these samples, it was necessary to enumerate the incidence of each particular item of the Item Sheet within the group; and then to reject

* Part of the material of this paper was presented by L. F. Collins to the Annual Conference of the British Psychological Society at Liverpool, April 1961.

items whose incidence for each sample did not reach 10 per cent. This was to avoid too skewed a distribution of any item, since such a distribution would tend to invalidate any correlational analysis undertaken. A criterion of at least 10 per cent.—and correspondingly of not more than 90 per cent. incidence —seemed appropriate to allow for this consideration.

This greatly reduced the number of items to be retained from the 150 potential items of the original Item Sheet. Moreover, it also led to slightly different results as between the sexes for some items have a widely differing incidence according to sex. The final list in the present study totalled 59 for the boys and 64 for the girls. The number of items common to both lists was 56. Tables I and II give details for boys and girls respectively.

TABLE I

Boys 8–10 Years

Maternal Lack

1. Before patient aged 5. Mother separated from child for at least 1 month.
2. After patient aged 5. Mother separated from child for at least 6 months.
3. Partial lack from going out to daily work or any other reason.

Maternal Attitude

4. Solicitude and anxiety. Greater than justified.
5. Solicitude and anxiety. Less than justified.
6. Irritation, manifest resentment or hostility. Greater than justified.
7. Over restriction.

Paternal Lack

8. Before patient aged 5.
9. After patient aged 5.
10. Partial lack from work: e.g. night work, traveller, etc.

Paternal Attitude

11. Solicitude and anxiety. Greater than justified.
12. Solicitude and anxiety. Less than justified.
13. Irritation, manifest resentment or hostility. Greater than justified.
14. Over restriction.

Family Environment

15. Sibling lack, i.e., only child or separated by long gap (at least 5 years).
16. Step-parent, foster parent, adopted.
17. Parental disharmony.
18. Discipline in home inconsistent.

Educational Environment

19. Poor standard reached in school work.
20. Unsatisfactory social adjustment at school.
21. Discrepancy between intelligence findings and educational levels.

Physical and Social Environment

22. Overcrowding. More than two persons, adult or children sleeping in one room or if the kitchen or accepted living room is also the sleeping quarters of any of the family, or if more than one family shares the kitchen, etc.
23. Breaks and changes in environment, e.g., child moves from home to home or from relative to relative, etc.

Early Life

24. Breast fed for 6 months or over.
25. Difficulties in feeding and weaning in first 9 months.
26. Difficulties with toilet training.
27. Undue or prolonged dependence on mother.
55. Not breast fed.

Family History

Parents, siblings, parental siblings, grandparents.
28. Pronounced psychopathy, including alcoholism or criminal record in the above stated relatives.
29. Neurosis in the above stated relatives.

Evidence in Child of Constitutional Tendency to Deviations of Extremes of Personality

30. Nervous, timid, abnormally shy or day-dreamer.
31. Aggressive, overactive, restless.

Disturbances of Function

32. Disturbance of eating.
33. Encopresis.
34. Nocturnal enuresis.
35. Disturbance of sleep.
36. Thumb sucking, tongue sucking, rocking, masturbation.
37. Nail biting.
56. Motor disturbance. Hyperactive.
57. Motor disturbance. Tics.
58. Aggressive manifestations. Temper tantrums.
59. Aggressive manifestations. Aggressiveness.

Disturbed Family or Social Relationships

38. Manifest disturbance in relation to mother or mother substitute.
39. Manifest disturbance in relation to father or father substitute.
40. Manifest disturbance in relation to siblings.
41. Manifest disturbance in relation to contemporaries at school.
42. Manifest disturbance in relation to school.
43. Manifest disturbance in relation to society, i.e., delinquency.

Conduct Disorders

44. Lying.
45. Truanting.
46. Stealing
47. Disobedience.
48. Destructiveness.
49. Fighting.

Psychoneurotic or Psychotic Phenomena

50. Anxiety symptoms. Somatic or psychic.

Intelligence Level

51. Equivalent to revised Stanford-Binet of 132–117. Superior or very superior.
52. Equivalent to revised Stanford-Binet of 116–101. Average plus.
53. Equivalent to revised Stanford-Binet 100–85. Average minus.
54. Equivalent to revised Stanford-Binet of 84–69. Borderline.

TABLE II

Girls 8–10 Years

Maternal Lack

1. Before patient aged 5. Mother separated from child for at least 1 month.
2. After patient aged 5. Mother separated from child for at least 6 months.
3. Partial lack from going out to daily work or any other reason.

Maternal Attitude

4. Solicitude and anxiety. Greater than justified.
5. Solicitude and anxiety. Less than justified.
6. Irritation, manifest resentment or hostility. Greater than justified.
7. Over restriction.

Paternal Lack

8. Before child aged 5.
9. After child aged 5.
10. Partial lack from work, e.g., night work, traveller, etc.

Paternal Attitude

11. Solicitude and anxiety. Greater than justified.
12. Solicitude and anxiety. Less than justified.
13. Irritation, manifest resentment or hostility. Greater than justified.

Family Environment

15. Sibling lack, i.e., only child or separated by long gap, at least 5 years.
16. Sibling attitude disturbed towards patient.
17. Step-parent, foster parent, adopted.
18. Disturbing relatives or others in house.
19. Parental disharmony.
20. Discipline in home inconsistent.

Educational Environment

21. Poor standard reached in school work.
22. Unsatisfactory social adjustment at school.
23. Discrepancy between intelligence findings and educational levels.

Physical and Social Environment

24. Overcrowding. More than two persons, adult or children sleeping in one room, or if the kitchen or accepted living room is also the sleeping quarters, of any of the family, or if more than one family shares kitchen, etc.
25. Overcrowding. Lack of garden, yard, quiet street involving restriction of activity of child: if close proximity of neighbours in flats, etc., involves restricting child's noise or activity normally permitted by parents.
26. Breaks and changes in environment, i.e., child moves from house to house, or relative to relative, etc.

Early Life

27. Prematurity.
28. Whether breast fed at all.
29. Breast fed for 3 months or over.
30. Breast fed for 6 months or over.
31. Difficulties with feeding and weaning in first 9 months.
32. Difficulties with toilet training.
33. Developmental dates abnormal.
34. Undue or prolonged dependence on mother.
64. Not breast fed.

Family History

Parents, siblings, parental siblings, grandparents.

35. Pronounced psychopathy (including alcoholism or criminal record) in above stated relatives.
36. Neurosis in above stated relatives.
37. Allergic illness in above stated relatives.

Evidence in Child of Constitutional Tendency to Deviations of Extremes of Personality

38. Nervous, timid, abnormally shy or daydreamer.
39. Aggressive, overactive, restless.

Disturbance of Function

40. Motor disturbance—hyperactive.
41. Disturbance of eating.
42. Encopresis.
43. Nocturnal enuresis.
44. Disturbance of sleep.
45. Gratification habits, thumb sucking, tongue sucking, rocking, masturbation.
46. Nail biting.
47. Aggressive manifestation. Temper tantrums.
54. Aggressive manifestation. Aggression.

Disturbed Family or Social Relationships

48. Manifest disturbance in relation to mother or mother substitute.
49. Manifest disturbance in relation to father or father substitute.
50. Manifest disturbance in relation to siblings.
51. Manifest disturbance in relation to contemporaries at school.
52. Manifest disturbance in relation to school.

Conduct Disorders

53. Lying.
55. Stealing.
56. Destructiveness.
58. Fighting.

Psychoneurotic or Psychotic Phenomena

59. Anxiety symptoms. Somatic or psychic.

Intelligence Level

60. Equivalent to revised Stanford-Binet of 132–117 superior or very superior.
61. Equivalent to revised Stanford-Binet of 116–101 average plus.
62. Equivalent to revised Stanford-Binet of 100–85 average minus.
63. Equivalent to revised Stanford-Binet of 84–69 borderline.

An examination of Tables I and II reveals the character of the variables involved in the study. It will be apparent that some items (as say 1 and 2 in both Tables), where the criteria for marking the item can be clearly defined,

TABLE III

Factor Loadings, Boys 8–10 Years

	I	II	III		I	II	III
1 ..	·17	·56	·22	31 ..	·49	−·13	−·18
2 ..	·21	·56	·12	32 ..	·27	−·21	·29
3 ..	·05	·07	−·04	33 ..	·01	·13	·23
4 ..	·03	−·40	·17	34 ..	·08	·01	−·05
5 ..	·26	·18	·07	35 ..	·20	−·14	·36
6 ..	·42	−·07	·29	36 ..	·09	−·05	·13
7 ..	·02	−·28	·03	37 ..	·28	−·11	·18
8 ..	·18	·60	·16	38 ..	·62	−·06	·17
9 ..	·16	·64	·19	39 ..	·43	−·12	·32
10 ..	−·01	·05	·02	40 ..	·40	−·26	−·12
11 ..	·08	−·25	·06	41 ..	·43	−·13	−·07
12 ..	·18	·01	·34	42 ..	·21	−·08	·09
13 ..	·27	−·18	·34	43 ..	·29	·30	−·28
14 ..	·14	−·30	·13	44 ..	·35	·12	−·34
15 ..	·10	−·02	·14	45 ..	·33	·34	−·26
16 ..	·21	·58	·14	46 ..	·33	·28	−·37
17 ..	·32	·01	·34	47 ..	·62	−·05	−·26
18 ..	·33	−·06	·18	48 ..	·51	·06	−·29
19 ..	·23	·07	·14	49 ..	·43	−·14	−·25
20 ..	·36	·08	−·04	50 ..	−·03	−·23	·44
21 ..	·08	−·03	·05	51 ..	−·06	−·19	−·07
22 ..	·21	−·06	−·11	52 ..	·00	−·07	·05
23 ..	·18	·56	·28	53 ..	−·01	·14	−·04
24 ..	−·04	−·21	−·01	54 ..	·16	·03	−·15
25 ..	·04	−·17	−·03	55 ..	−·07	·30	·10
26 ..	·13	−·05	·03	56 ..	·47	−·33	−·26
27 ..	·13	−·25	·20	57 ..	·01	−·16	·23
28 ..	·20	·13	·23	58 ..	·29	−·21	·20
29 ..	·20	−·21	·20	59 ..	·50	−·23	−·32
30 ..	−·22	−·06	·27				
					7·51%	6·29%	4·43%

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or items that are fairly patent matters of fact (such as Table I, 16, 33, 34, 37 and 45), little difference would be expected to show itself as between different people completing the Item Sheet. In other words, we should expect good reliability. Other items, such as those referring to parental attitudes or the quality of relationships between people, for which no criteria are given, allow scope for individual differences in marking. Thus a degree of unreliability would be expected to attend the use of such items; although it may be observed that with these items the proviso is made that they be not marked unless the disturbed relationship, etc., is manifest; no attempt is made to register implicit disturbance in these areas.

Apart from possible individual differences in subjective assessment, some of the inherently more objective items—such as those referring to family history or child's early history—may be subject to the vagaries of inaccuracy of recall and report. The hazards of history-taking have been clearly indicated before now (10). However, no direct formal attempt has so far been made (nor seemed justified at this exploratory stage) to validate or establish the reliability of the items used.

PROCEDURE

For the purpose of obtaining correlation coefficients, the tabulation of the data took the simple form of indicating the presence or absence of the variables

TABLE IV

Factor Loadings, Girls 8–10 Years

	I	II	III		I	II	III
1 ..	·50	−·07	−·01	33 ..	·14	·54	·05
2 ..	·51	·21	·04	34 ..	·13	·32	·10
3 ..	·07	−·17	·08	35 ..	·25	−·02	−·08
4 ..	−·43	·05	·29	36 ..	−·22	−·01	·27
5 ..	·35	−·18	·12	37 ..	−·08	−·24	·16
6 ..	·07	−·39	·05	38 ..	−·14	·50	·22
7 ..	−·11	−·23	·02	39 ..	·48	−·21	−·02
8 ..	·28	−·17	·15	40 ..	·35	·23	·04
9 ..	·38	−·06	·23	41 ..	−·16	−·01	·36
10 ..	·00	−·09	·06	42 ..	−·03	·33	·18
11 ..	·11	−·15	·16	43 ..	·08	·05	−·00
12 ..	·26	−·43	·35	44 ..	−·01	−·21	·55
13 ..	·11	−·33	·26	45 ..	·05	·00	·35
14 ..	−·16	−·10	·01	46 ..	·11	·15	·18
15 ..	−·21	−·08	·38	47 ..	·23	−·01	·36
16 ..	·02	−·12	·13	48 ..	·21	−·30	·43
17 ..	·46	−·24	·02	49 ..	·07	−·21	·54
18 ..	·03	−·17	·15	50 ..	·17	−·14	·23
19 ..	·27	−·10	·22	51 ..	·40	·50	·03
20 ..	−·11	−·31	·40	52 ..	·22	·43	·16
21 ..	·19	·43	−·04	53 ..	·32	−·36	−·38
22 ..	·29	·62	·27	54 ..	·34	·11	−·01
23 ..	·23	·17	·03	55 ..	·37	−·31	−·29
24 ..	·17	−·12	−·26	56 ..	·48	−·20	−·07
25 ..	·15	·15	·05	57 ..	·63	·12	·12
26 ..	·37	−·09	·20	58 ..	·64	·11	·06
27 ..	·01	−·04	·03	59 ..	−·31	·30	·17
28 ..	−·35	·10	·29	60 ..	·02	−·21	−·00
29 ..	−·23	−·00	·07	61 ..	−·23	−·12	·26
30 ..	−·42	−·06	·06	62 ..	·17	−·19	−·33
31 ..	−·03	−·10	·20	63 ..	·14	·43	·16
32 ..	·26	·20	·22	64 ..	·52	−·08	−·13
					7·90%	5·99%	4·88%

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for each child. Product moment correlations were obtained, having recourse to Mercury, the London University Computor, and making use of a programme devised for the purpose by W. L. B. Nixon of the London University Computor Unit. The correlation matrices are not reproduced here owing to lack of space.*

Principal component factors were then derived from these matrices, again with the benefit of a programme devised by W. B. L. Nixon for this operation. As the amount of variance extracted by these components was small, only three factors for each matrix are reported. Tables III and IV show, for the boys and girls respectively, the loading of each item upon the three factors, and indicate the total amount of variance accounted for by each factor.

Results

Perhaps the first notable finding of interest is the small amount of correlation in the data, and the consequent small amount of communal variance forthcoming from the factor analysis. The primary implication of this would appear to be that the children comprising this sample are, to a far-reaching degree, heterogeneous. This is a finding that many may feel is in keeping with their clinical experience. There seems no reason to suppose that, in regard to this result, these children are unrepresentative of child guidance populations generally. To some extent, the low degree of intercorrelation may arise from the kind of data and procedure here followed. Reference has been made to the subjective element and other possible inaccuracies that may enter into the data; insofar as these shortcomings exist, and insofar as they may be assumed to operate in a random manner, the amount of what may be termed "error variance" is increased, and discernible correlation reduced.

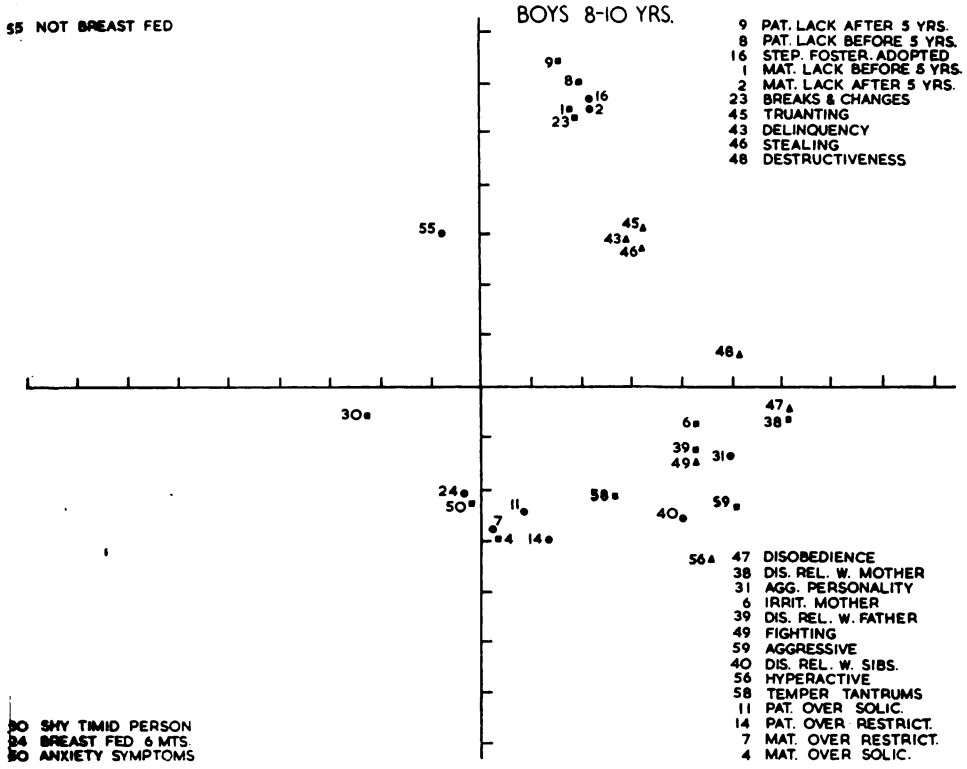
We now turn to consider the factors that emerge. The character of these is perhaps open to varying interpretation. It will be seen that items having highest loading on the first factor for the boys are Disobedience, Destructiveness, Disturbed Relations with Mother, the Outgoing or Aggressive extreme of personality type. The only item with any appreciable negative loading on this factor is that descriptive of the Shy, Timid, Nervous child. Thus it may be said that the axis of this factor runs through an area of common variance describing children who show "difficult", outgoing, oppositional behaviour; behaviour which, whatever its mechanics, seems to have the functional role of rebelliousness. Therefore, we are tentatively applying the label "Rebelliousness" to this factor.

It is perhaps notable that in plotting these factors graphically one against the other (as is shown for the boys' factors 1 and 2 in Figure 1) the items tend to lie only at the positive end of the axes; we may presume that the factorial "spaces" which thus appear would be filled by the characteristics of non-clinic children. Moreover, our Item Sheet does not contain items of "good" behaviour. As noted, the only item antithetical to factor 1 marks the shy, timid child who may be thought of as tending to shrink back, psychologically, from his environment, rather than as engaging in rebellion against it. In this connection it has been frequently indicated that an important criterion affecting the referral of the child to the clinic is his "nuisance value". It would seem evident that attendant upon the emergence of the first factor is the crossing of the tolerance limits of the adult world.

The second factor emerging from the boys' data seems quite clearly identifiable. Its high loadings are almost exclusively found in items indicative of the

* Anyone interested in the details of these is invited to write to the authors.

lack of parents and the lack of enduring parental substitutes. This may be termed a factor of "Rootlessness". It has several high negative loadings from items descriptive of the over-solicitous, over-restrictive parent. Practically no items descriptive of the child itself, as distinct from its parental situation are found close to the axis of this factor. The linear antithesis between groups of items describing the unparented, rootless child and the cossetted, highly-valued child appears striking.



Where the plotted point of an item is given as a *square*, it indicates that that item has a loading of +0·15 or more on *Factor 3*; where the point is a *triangle* it indicates that item loads −0·15 or more on *Factor 3*.

FIG. 1.—Factor 1 is shown as the horizontal axis, Factor 2 as the vertical. The items with highest loading on each are plotted.

The relation between factor 1 and factor 2 provides some possibly illuminating considerations. The process of extracting the factors ensures that they are independent (i.e., are orthogonal). Thus the "Rebelliousness" of factor 1 is practically uncorrelated with the "Rootlessness" of factor 2: this suggests that what may be called oppositional behaviour in general is not more apparent in the rootless as opposed to the cossetted boy; that is, it occurs in both settings. However, such behaviour has a tendency to take a different form in the two cases; consider that for a given degree of "Rebelliousness," coupled with a given degree of "Rootlessness" emerges Truancy, Delinquency, Stealing; a similar degree of Rebelliousness" coupled with the opposite of "Rootlessness" (say, "Belongingness') is more likely to gives rise to Hyperactivity, Temper Tantrums, Disturbed Relations with Sibs and so on.

Factor 3 is rather less satisfactory to attempt to characterize, having lower and less exclusive loadings. The items having highest correlation with it are Anxiety Symptoms and Disturbance of Sleep; and its highest negative loadings are for Stealing, Lying, Aggression. The item denoting the Shy, Timid child bears some relation to it, as also does Disturbance of Eating. Paternal Irritation, Lack of Paternal Solicitude. This component seems to bespeak a notion of anxiety associated with some degree of paternal hostility.

We now turn to consider what emerges from the girls' data. With its highest loadings for Fighting and Destructiveness and an appreciable loading for Disobedience, the girls' first factor is clearly similar to that of the boys'. There is, however, a further feature, which differentiates it radically from the boys: the items indicative of lack of parental care also fall predominantly along this axis, and the items indicative of close or excessive parental care are placed negatively along it. In other words, the "Rootlessness" we found as orthogonal to "Rebelliousness" in the boys is, in the case of the girls, closely associated with it. This appears to be a very noteworthy sex difference in the disorder pattern presented by the sample. The implication we are inclined to draw from this is as follows: a boy (at this age, at any rate) may show rebelliousness—disobedience, destructiveness, fighting—as a phenomenon in both kinds of setting, whereas a girl of this age will only present these more forthright, oppositional manifestations when she is a rootless child. To put it another way, the little girl of this age who is cossetted or well-established in an enduring family situation will be expected hardly ever to show these extreme signs of rebelliousness. She may, of course, show other, and possibly serious, kinds of disturbance.

Factor 2 of the girls' data points to another sex difference. Here the highest loadings are for the items Unsatisfactory Social Adjustment in School, Developmental Dates Abnormal, Nervous, Shy Timid child, etc., The variance involved here bespeaks the association between items evoking an image of a dull, backward, nervous little girl who is failing scholastically and socially at school (*vide* items 22, 23, 38, 51, 52 in Tables II and IV); There are negative loadings for Lying and Stealing, as well as for certain hostile parental attitudes, indicating that this prototypical child has a good manifest relation with her parents. This factor does not appear amongst, nor resemble, any of the three factors arising from the boys' data. The implication seems to be that there is a group of girls referred, at this age, in whom these items are particularly associated; and that such an association is not notably apparent amongst boys of the same age.

The third factor extracted from the girls' data has its highest loadings for Disturbance of Sleep, Disturbed Relations with Father, Disturbed Relations with Mother; Disturbance of Eating is also fairly characteristic of this factor also. In general it is similar to the 3rd factor for the boys but there are some definite differences as well, the significance of which are not obvious. It would seem fair to say, however, that there is evidence for an association between disturbance of sleeping and eating and troubled relations with parents, for boys and girls at this age.

Discussion

There do not appear to be many studies which are readily comparable to the present one; and owing to differences in the variables and samples employed, extended comparison with other work runs the risk of lapsing into

speculation. The main interest of the present findings to the writers appears to be:

(*a*) the high degree of heterogeneity within a group of psychiatric clinic children, once selection has ensured homogeneity of age, sex, I.Q. and some other obvious signs.

(*b*) the importance of sex differences.

(*c*) the suggestive import of the factors extracted from the analysis.

(*a*) Although a large number of highly significant correlations appear in the matrices, none is large in size; the biggest being only fractionally larger than ·5. Even allowing for shortcomings in the formation of the data, and the limitation of the particular correlational statistic used, it seems unlikely that the association between any pair of such variables as child psychiatrists generally consider relevant will approach what might be termed predictive level of significance. Where a careful selection of such variables takes place, as described for example by Hewitt and Jenkins (8) in forming their behaviour syndromes only two coefficients of ·7 emerged, most others being much lower. Consequently, the use of mere exploratory correlational procedures like the present seems unlikely to uncover any simple divisions in such data. (This is not to offer any detraction from the obvious value of canvassing ideal-type patterns in the way Hewitt and Jenkins have done). Possibly we stand in need of entirely different kinds of data, although when fairly different sets of observations are used, as those of Burt and Howard (3) the degree of heterogeneity, both as evidenced in the correlation matrices and in the extracted factorial content, is still extensive.

(*b*) The outcome of the present analysis would seem to afford some vindication of the decision to treat the sexes separately (the same could be said regarding age-levels). The occurrence of aggressive signs in boys is an expected and often noted phenomenon (cf. 9). The special relation here implied between a quality of familial deprivation and marked oppositional behaviour in girls—at this age-level at least—has not, to our knowledge, been explicitly shown before. Nor has the occurrence of a type of timid female school failure at this age.

Ackerson noted the differential incidence of his notations with age (1) but "partialled out" the effects of age in arriving at his correlation coefficients (2). This, of course, specifically leaves out the variable contribution age may make. Hewitt and Jenkins failed to separate the sexes, and their age range would have mixed prepubertal and adolescent children. The present studies imply that there are features of childhood disturbance which are particularly associated with age and/or sex. Clearly there will be some that are not. In evaluating any given investigation, it would seem essential to be able to distinguish which is which.

(*c*) The smallness of the variance accounted for by our factors justifies question as to their reliability and significance; that is whether they might not perhaps arise from more or less chance conglomerations of variance. This possibility seems effectively refuted by the findings of rather similar factors at the other age-levels; (5, 6)

Thus it seems fair to conclude that the main factors represent limited but reliable trends in the material, so would be expected to recur in any similar empirical study undertaken. The notion of Rootlessness-Cossettedness as a continuum on which every child might be allotted a position, seems a

valuable one arising from these data. It corresponds with much that has been said (e.g. 7, 11) about the role of socialization, and in particular of psychological disorders as being related to inadequate or excessive learning of social behaviour. At the same time, it may constitute a conceptual context within which notions of parental deprivation and parental attitudes may be related. For example, separation of a child from enduring parent figures and open rejection or negligence of a child within an enduring familial situation may be thought of as different degrees of "Rootlessness" rather than as distinct categories of experience. (It still remains of moment to discover the mechanics of development under such conditions, the subject which Bowlby has done so much to develop.) At the other extreme, parental attitudes of over-solicitousness and over-restrictiveness may more meaningfully be viewed against the more fundamental condition of degree of rootedness in a family.

Summary:

This paper describes the outcome of a principal component (factor) analysis carried out on some child psychiatric clinic case material. Two samples were used: 268 boys between their eighth and tenth birthdays and 98 girls of the same age. All children regarded as epileptic, psychotic or mentally defective had been eliminated from these samples, leaving the wide range of personality and behaviour problems familiar in child guidance clinics. The analysis of the boys' and girls' material was carried out separately. The variables used in the study were some 60 or more items including most of the variables usually regarded as relevant to assessment of child guidance clinic cases.

Relatively little intercorrelation and common variance was found in the data. Factors of "Rebelliousness", "Rootlessness" and "Anxiety" were identified amongst the boys. With the girls, "Rebelliousness" and "Rootlessness" appear as a single factor. They show a "Timid, School Failure" factor that did not emerge for the boys; and an "Anxiety" factor somewhat comparable with that of the boys.

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