# SOCIAL CLASS AND MENTAL ILLNESS IN CHILDREN: THE QUESTION OF CHILDHOOD PSYCHOSIS\*

JOHN F. McDERMOTT, JR., M.D.,† SAUL I. HARRISON, M.D.,† JULES SCHRAGER, M.S.W.,‡ JANET LINDY, M.A.,‡ ELIZABETH KILLINS, M.S.W.†

Data are presented from the psychiatric evaluations of a series of children diagnosed as psychotic and divided into five groups according to social class. These data are analyzed and compared with special reference to the clinical and social questions which are raised as a result of differences among the groups.

PSYCHOSIS IN ADULTS has been described as class-related by Hollingshead and Redlich 6 who found an inverse relationship between psychosis and class status, that is, significantly greater incidence of all forms of psychosis in lower socioeconomic groups. The nature of this association between social class and psychosis has been examined by other investigators. Dunham 4 discovered that although the occupation of the adult schizophrenic in the general population was typically "lower-class," the occupation of the father of the schizophrenic patient was equally distributed

all along the socioeconomic continuum. He suggests, on the basis of this finding, that the development of the schizophrenic condition in an individual prevents him from realizing his occupational goals; the psychiatric debility serves to determine social class, rather than social class determining the disorder. Dunham's observations and conclusions were in substantial agreement with those described in an earlier study by Morrison. Here too the distribution of occupations of the fathers of schizophrenic patients were seen to be similar to the distribution of occupations of the fathers

<sup>\*</sup> Presented at the 1966 annual meeting of the American Orthopsychiatric Association, San Francisco, California.

This is one of a series of reports emerging from a long-range investigation of social-class factors and mental illness in children. The study was conducted in the department of psychiatry, University of Michigan, Ann Arbor, Michigan.

The authors wish to express their thanks to Miss Susanne Chilman for her invaluable help in gathering the data for this study.

<sup>†</sup> Childrens Psychiatric Hospital, Ann Arbor, Michigan.

<sup>‡</sup> University Hospital, University of Michigan, Ann Arbor, Michigan.

of normal individuals, and it was concluded that schizophrenia is more likely to cause individuals to descend the socioeconomic ladder that it is to be fostered by lower socioeconomic status.

The relationship between social class and psychosis in children has received less attention than this same relationship in the adult population. The inability of a psychotic child to function adequately would be expected to have little effect on his social-class standing. Although the relative socioeconomic stability of the psychotic child, in comparison to the psychotic adult, serves to simplify research aimed at investigating the relationship between social class and psychosis in children, many other problems complicate the investigation of this relationship. Differential diagnosis is often difficult; the clinical picture is so different from that of adults; so many subdivisions have been described. The term childhood psychosis has come to mean for some an umbrella that covers many diagnostic labels such as autism, symbiotic psychosis, childhood schizophrenia, borderline states, developmental arrest, atypical children, etc. Other authors advocate considering each of these as separate distinct entities, e.g., autism should be distinguished from childhood schizophrenia.18

The specific issue of social class and psychosis in children has been explored intensively for this special form, designated as "early infantile autism." 8 Kanner suggests that this category of childhood psychosis is characteristically an "upper-class" phenomenon, its relationship to social class being precisely opposite to that commonly noted in adult psychosis. He described the parents of his cases as intelligent, well

educated, often professionals, scientists and writers. In their "Followup Studies of Austistic Children," Kanner and Eisenberg 9 reiterate:

Our attention was directed to the indisputable fact that the parents came from intelligent, sophisticated stock.

In a review of subsequent cases of autism in the literature, Rimland <sup>18</sup> found evidence which overwhelmingly supported Kanner's original report that the parents of autistic children formed a unique and highly homogeneous group in terms of intellect and personality.

Lowe <sup>10</sup> has reported similar patterns for parents of children diagnosed as chronic undifferentiated schizophrenia: that they are better educated and have attained higher occupational levels than parents of disturbed, nonschizophrenic children. However, Kallman <sup>7</sup> and Bender <sup>2</sup> have described schizophrenic children as coming from dramatically different kinds of families and inadequate homes.

The present study is part of a series exploring the association between social class and mental illness in children based on data obtained from our own patient population. In previous investigations of social class and mental illness in children we have found that more serious symptoms and signs of mental illness were noted more often in the lower socioeconomic groups, and that milder forms were observed more frequently in the upper groups. We now examine the most serious form of mental illness in children, psychosis, and address ourselves to the following problems: (1) Is the diagnosis of childhood psychosis in children related to social class? (2) Is the diagnosis of "borderline" psychosis in children related to social class? (3)

Is the form or expression of childhood psychosis related to social class?

### **METHOD**

The intake records of 676 children up to the age of 14, who were evaluated at the University of Michigan's Children's Psychiatric Hospital from July of 1961 to July of 1963, were examined. These code sheets contained a variety of clinical data which had been filled out by the psychiatrist at the time of the child's initial evaluation. (This material had been accumulated prior to the inception of the current study.) The data were then transposed to IBM cards and processed by computer. The children were then divided into five socioeconomic class groups based on their father's occupations.\* This has been found in other studies to correlate well with various other determinants of social-class standing.15

(1) Social class and psychosis. Childhood psychosis was operationally defined to include any of the following diagnostic entities: autistic type, symbiotic type, mixed autistic symbiotic type, and various forms of schizophrenia. The occurrence of diagnosed psychosis was tabulated within each of the five social class categories described above. The Chi-square test was employed to determine whether or not a statistically significant relationship existed between social class and the diagnosis of psychosis.

- (2) Social class and borderline psychosis. The occurrence of "borderline psychosis of childhood" was tabulated within each of the social-class categories. The Chi-square test was employed to determine whether or not a statistically significant relationship existed between social class and the diagnosis of borderline psychosis.
- (3) Social class and expression of psychosis. Children diagnosed as psychotic were combined with the borderline psychotic group. Both the presence and the severity of nine selected clinical signs and symptoms were examined. The primary group were: affective disturbance, disturbance of thought process, withdrawal and autism, hallucinations and delusions, and paranoid symptoms. The secondary group were: free-floating anxiety, depressive, phobic, obsessive-compulsive symptoms. The presence and the severity of the nine selected symptoms were then examined in terms of their social-class distribution. The Chi-square test was employed to determine the interaction between social class and presence, as well as between social class and severity, of various clinical signs and symptoms.

### RESULTS

Of the 676 patients evaluated, 76, or 11.2 per cent were diagnosed as psy-

<sup>\*(1)</sup> Unskilled or semi-skilled laborer: employed for tasks involving either no training or very small amount of training, e.g., janitor, assembly line worker (n=227); (2) skilled laborer: employed in manual activity which requires training and experience, e.g., machinist, self-employed small farmer (n=184); (3) lower white-collar: involved in a small business or in clerical or similar work which is not primarily manual and/or which depends on some educational or special background, e.g., policeman, sales clerk, typist (n=78); (4) upper white-collar: employed in more responsible administrative white-collar position, e.g. supervisor, large-scale farmer, school teacher, nurse (n=80); (5) professional or executive: employment depends on professional training beyond the college level or important executive responsibilities, high financial status, e.g. university teacher, attorney, engineer (n=107).

Table 1

THE DIAGNOSIS PSYCHOSIS IN CHILDREN TOTAL N=676 (PSYCHOTIC=76)

VARIABLES OF AGE AND SEX

|             | Unskilled<br>N=227<br>Psychotic=25 | Skilled<br>N=184<br>Psychotic=22 | Lower White<br>Collar<br>N=78<br>Psychotic=9 | Upper White Collar N=80 Psychotic=10 | Professional-<br>Executive<br>N=107<br>Psychotic=10 |
|-------------|------------------------------------|----------------------------------|--|--------------------------------------|---|
| Sex M:F     | 16:9                               | 17:5                             | 9:0  | 8:2                                  | 5:5   |
| Age         |                                    |                                  | •  | •                                    | -   |
| 3–6 years   | 4                                  | 6                                | 3  | 0                                    | 5   |
| 7–10 years  | 11                                 | 6                                | 4  | 4                                    | 3   |
| 11–14 years | 10                                 | 10                               | 2  | 6                                    | 2   |

chotic. Twenty-three of the 76 were seen as frankly psychotic, and 53 as borderline psychotic. (A diagnosis of typical autistic psychosis was rare. There were only five of these children, one of professional executive parents, one upper white-collar, two skilled

laborer, one unskilled laborer. Two symbiotic psychotics and two mixed autistic-symbiotic were diagnosed, split evenly at each end of the social-class scale. These numbers were not considered sufficient to draw any conclusions.) Breakdown according to age and

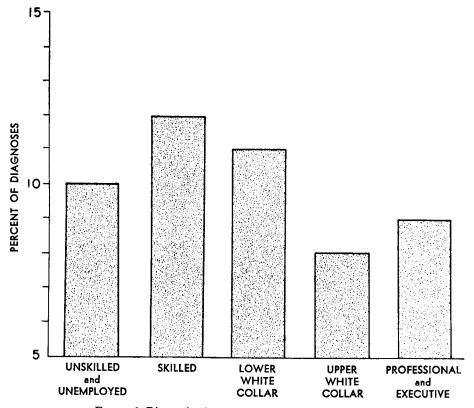


FIGURE 1. Diagnosis of psychosis in each occupational class.

sex (TABLE 1) demonstrates some differences according to social class. The usual predominance of boys was noted except in the professional executive class where there were equal numbers of boys and girls. The children of professional executive parents tended to be seen for evaluation at earlier ages.

Contrary to hypotheses derived from our previous studies, no significant difference was found in the occurrence of diagnosed psychosis among the five social-class groups. This was true when frank psychosis was viewed separately (df=2,  $x^2$ =3.173, p=n.s.) or when psychosis and borderline psychosis were combined (df=4,  $x^2$ =0.621, p=n.s.) (FIGURE 1).

Neither was the presence or absence of symptoms such as withdrawal and autism, hallucinations and delusions, disturbance of thought process, affective disturbance, and paranoid thinking or behavior, or other symptoms such as depression, phobias, obsessions and compulsions, free-floating anxiety related to social class\*; that is, there were no statistically significant differences in

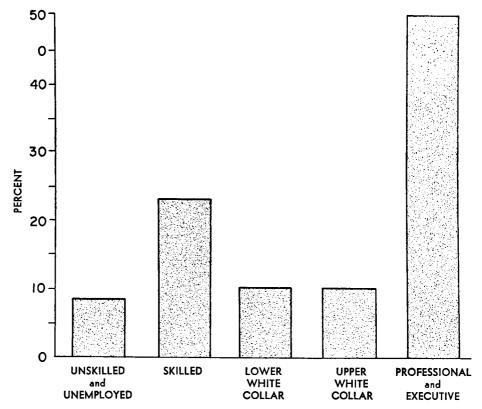


FIGURE 2. Severe withdrawal and autism in the psychotic children by class.

<sup>\*</sup> It may be of interest to note how frequently these symptoms and signs were considered to be present in the psychotic children of each social class: 77 per cent of the total psychotic group demonstrated withdrawal and autism, 20 per cent severe; 32 per cent hallucinations and/or delusions, 5 per cent severe; 80 per cent disturbed thought process, 28 per cent

the occurrence of each of these symptoms from class to class. However, the degree of two of these factors (where the symptom or sign was rated as mild, moderate, severe, or predominant in the clinical picture) was significantly related to social class (FIGURES 2 and 3). "Severe or Predominant" withdrawal and autism was seen significantly more often (p=.015 one-tail test) in the professional executive group when compared to the other groups. "Severe or predominant" disturbance in thought process was seen

significantly more often in the children of the skilled working-class group and the professional executive group (df=3,  $x^2$ =9.498, p<.05). As illustrated graphically in FIGURES 2 and 3, both professional executive and skilled groups followed a similar trend.

## DISCUSSION

The fact that we found no statistically significant difference in the occurrence of childhood psychosis among the various occupational classes presented a picture clearly contrary to our expecta-

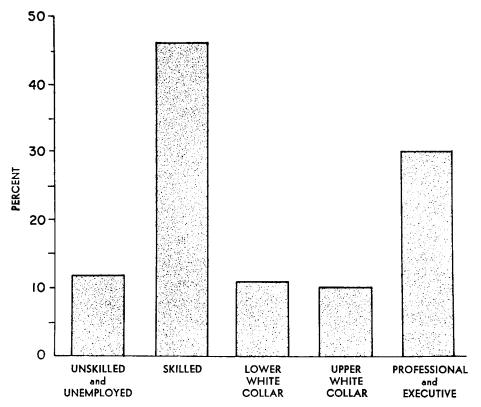


FIGURE 3. Severe disturbance of thought process seen in the psychotic children by class.

severe; 78 per cent affective disturbance, 32 per cent severe; 43 per cent paranoid symptoms, 32 per cent severe. Of the second group of symptoms 42 per cent depression, 1.5 per cent severe; 18 per cent phobic symptoms, 3 per cent severe; 27 per cent obsessive-compulsive symptoms, 5 per cent severe; 62 per cent free-floating anxiety, 10 per cent severe.

tions, which were based on comparable studies of adult populations and our earlier work with children. We were stimulated to speculate as to the cause. First of all, this finding may be "actual" or "apparent," If it is actually true in the population of disturbed youngsters seen at our clinic, (and its validity is substantiated in the examination of results of other years, and providing that we see a representative sample of the population) it suggests that social class is not as important a factor in childhood psychosis as it is in other kinds of mental illness in children. It may suggest that psychosis, like the genetically determined forms of severe mental retardation, falls in a random fashion throughout the population.<sup>3, 16</sup> Recognizing that correlation does not imply causation, we might, however, speculate that it would give added weight to the idea that a basic biological quality, i.e., a constitutionally determined ego defect, is operating in this particular form of mental illness. childhood psychosis, whose etiology is presently so unclear and one of the major dilemmas of child psychiatry today.

The difference in symptom expression. however, suggests that even if such a basic common factor exists, the form in which this is expressed may differ from class to class presumably due to the child's experience. The finding of severe withdrawal and autism in the professional executive group is interesting to consider further. These symptoms, when they take the form of the diagnosis of infantile autism, as has been noted, are considered to be associated with predominantly educated, upperclass families. Kanner 8 was the first to describe clearly the autistic psychotic child's withdrawal from frustrating re-

lationships with cold, interpersonally aloof parents. Extending this finding to psychosis in general, we may wonder whether the style of a particular culture or group tends to be adopted in an exaggerated form under the stress of illness and provide the form for that illness. Do the upper groups tend to isolate feelings more than others? It is felt that a characteristic of this group is to value the introspective and abstract style of thinking (versus the motoric style of the lower group) in their child-rearing practices.17 Such intellectualization and isolation need not imply hostility so much as coldness and other parental interests outside the family, thus providing less emotional stimulation for youngsters to "learn" how to feel. Those youngsters who were vulnerable, for one reason or another, to psychosis might then tend to withdraw into solitude, the only way they have learned to behave under stress. As for thought disturbance, which seems also to be a primary affliction of upper-class psychotic children in our group, we may consider that thinking is best built on an emotional foundation, and thus may suffer a parallel fate under stress.

As for the curious finding that children of skilled working-class parents followed the same trend as those of professional executive parents, we have noted and explored more fully in a previous report <sup>11</sup> our observation that in many ways the children of the skilled families tend to be seen as demonstrating emotional pathology similar to children of the highest group, rather than those of their immediate social-class neighbors.

Thus far we have discussed implications of our results if they were typical and representative of a wider general

population. However, we suspect that they are not typical but "apparent." Psychosis may occur more often in one group than another, and in our study for example, the finding may be a true one for the upper group, but depressed for the lower one. First of all, we must consider validity in terms of the size of our sample. Secondly, as we have noted, there is a tendency for children of the upper group who have been diagnosed as psychotic to have been seen at an earlier age than those of the lower group, thus suggesting differential problem of diagnosis from one age group to the other, assessment of "thinking" which is age appropriate varying from one group to another, etc.

"Selection" factors, which have been discussed in our previous papers 5, 11 also must be considered. The upper socioeconomic groups have better access to medical care and are said to have a greater concern about deviation in their children in such areas as withdrawal and thinking peculiarities. Our sample may be skewed by the fact that Children's Psychiatric Hospital operates an inpatient service so that many seriously ill children are referred to us for evaluation with the hope of obtaining inpatient care for them.

In addition to selection factors such as the degree and kind of parental and community concern about certain symptoms and behavior patterns in children which vary from class to class, we must look to the evaluators themselves. For example, would the observation of social withdrawal and thinking disturbance in the lower-class child be considered to be not unusual and a reflection of our low expectations for understimulated, disadvantaged children? If this were the case, it might not then be noted either

by a potential source of referral or by the examiner at the clinic, allowing these children to remain unidentified as seriously mentally ill. Concreteness of thinking and difficulty conceptualizing may be considered cultural phenomena rather than psychopathology. Consider further the post-referral factors operating at the clinic itself which may influence our findings; it is possible that these findings may not actually represent an accurate picture of the children evaluated at our clinic, but reflect either our own preconceptions and unwitting social-class biases and/or factors inherent in the diagnostic process itself. This is a potential hazard for all of us in the mental health profession. There are no standard tests for mental illness such as the X-ray and blood test provide for our medical colleagues—no techniques which eliminate unwitting social-class biases. In our work the clinician himself is the diagnostic instrument.19 It is possible that when the children of professional executive and skilled parents who are usually a highly ambitious group, do not "make sense" to us as evaluators, we are quick to note this as psychopathology.

Finally, we wish to consider the meaning of the label "psychosis," which would include both the community's feeling response and subsequent service. The term is often frightening to the extent that the child may well be excluded from service in the home community. Thus the avoidance of this diagnosis by us, perhaps more in the lower group, would be understandable if the clinician feels that in many cases the label of psychosis will result in little or no treatment in the community because of the implication of severity and poor prognosis. Harrison 5 has noted that the child

of the professional executive parent has twice as great a chance of being offered psychotherapy in our clinic, where ability to pay is hardly a factor, than the child whose father was an unskilled worker. Furthermore, the upper groups can buy private help for their children, but the lower groups must rely on state hospitals and mental health clinics in the community for treatment. As we know, these clinics prefer "good treatment cases," and psychosis, unfortunately, is as a rule relegated to special interest only for research purposes. Thus the diagnosis of psychosis may tend to reduce the possibility of getting help.

Where then would the sicker children be found, if we assume that the low occurrence of psychosis, particularly in the unskilled group, is artificially depressed? It is probable that many psychotic children are deliberately diagnosed and masqueraded as mentally retarded by professionals since at least in our state, it is sometimes easier to find special education for a retarded than a psychotic, especially an autistic, youngster. However in our own clinic series, psychosis is probably not confused with mental retardation or organic brain syndrome, as we found in a previous study that there were fewer mentally retarded youngsters diagnosed in the lower group than was expected.12 However, in another study 11 we also reported a significantly higher incidence of diagnosed personality disorders in the unskilled group than in the other groups. Here "behavior" or acting out is implied. It has often been suggested that outwardly directed behavior is a characteristic of the lower group, whereas inwardly directed behavior is a mode of expression of the upper group who seem more disturbed in their thinking and tend to withdraw when they are psychotic.

On the other hand, we may consider the possibility that some of the individuals diagnosed as personality disorders in the lower group are masked psychotics, or latent psychotics who will later blossom into a frankly psychotic state. Bender has described pseudoschizophrenias, one of which is the pseudopsychopathic or paranoid, actingout, aggressive antisocial type.2 There is also the possibility that mental illness may take one form in childhood and yet another in adulthood, i.e., these youngsters appear to suffer from personality disturbances when they are children, but appear psychotic when they are adults. O'Neal and Robbins 14 found a subgroup of antisocial children who developed into schizophrenic adults.

# SUMMARY

Statistical analysis of the diagnosis of psychosis in all children evaluated at the Children's Psychiatric Hospital of the University of Michigan Medical Center from July, 1961, to July, 1963, (676 patients) reveals no significant differences in the incidence of psychosis among the five social-class groups (professional, executive, upper white-collar, lower white-collar, skilled laboring-class, and unskilled laboring-class). It would appear from our studies that social class is not as important an influence in the diagnosis of psychosis in children seen at our clinic as it is in other forms of mental illness. However, the expression of the psychotic illness correlates with social class. Withdrawal and autism in their severe form occurred significantly more often in the professional executive group while disturbance of thinking occurred significantly more often in both professional executive and skilled working-class groups. These findings suggest the possibility that family styles and customs of child rearing may influence the expression of psychosis. Problems of methodology underlying social-class research such as case findings, biases in referral sources and evaluators alike, and hidden factors in "diagnosing" certain disorders also are considered.

#### REFERENCES

- 1. Bender, L., and A. Grugett. 1956. A study of certain epidemiological factors in a group of children with childhood schizophrenia. Amer. J. Orthopsychiat. 26: 131.
- 1954. Treatment of juvenile schizophrenia. A resume of nervous and mental diseases proceedings.
- 3. Birch, H. 1963. Brain Damage in Children: The Biological and Social Aspects. Williams and Wilkins, Baltimore.
- DUNHAM, H. 1964. Social class and schizophrenia. Amer. J. Orthopsychiat. 34(4): 634.
- 5. HARRISON, S. I. ET AL. 1965. Social class and mental illness in children: Choice of treatment. Arch. Gen. Psychiat. 13(Nov.).
- HOLLINGSHEAD, A., AND F. REDLICH. 1958. Social Class and Mental Illness: A Community Study. John Wiley & Sons, Inc., New York.
- Kallman, F., and B. Roth. 1956. Genetic aspects of pre-adolescent schizophrenia. Amer. J. Psychiat. 112.
- 8. Kanner, L. 1942-43. Autistic disturbances of affective contact. Nervous Child. 2.

- 9. AND L. EISENBERG. 1955. Followup Studies of Autistic Children in The Psychopathology of Childhood. Hoch and Zubin, eds. Grune and Stratton, New York.
- Lowe, L. 1966. Families of Children with Early Childhood Schizophrenia. Arch. Gen. Psychiat. 14(Jan.).
- 11. McDermott, J., et al. 1965. Social class and mental illness in children: Observations of children of blue collar families. Amer. J. Orthopsychiat. 35(3): 500.
- 12.—, 1965. Social class and mental illness in children: The diagnosis of organicity in mental retardation. J. Am. Acad. Child Psychiat. (in press)
- 13. Morrison, S. 1959. Principles and methods of epidemiological research and their application to psychiatric illness. J. Ment. Science. 105. pp. 999-1011.
- 14. O'NEAL AND ROBBINS. 1958. The relation of childhood behavior problems to adult psychiatric states: A 30 year follow-up study of 150 subjects. Amer. J. Psychiat. 114. pp. 961-969.
- 15. REISS, A., ET AL 1961. Occupations and Social Status. Free Press, New York.
- Report of the American Medical Association Conference on Mental Retardation, Chicago 1964. Jan. 18 1965. J. Amer. Med. Assoc. 191: 3. p. 243.
- RIESSMAN, F. 1962. The Culturally Deprived Child. Harper and Row, New York.
- RIMLAND, B. 1964. Infantile Autism. Appleton-Century-Crofts, Division of Meredith Publishing Company, New York.
- SANAU, V. 1963. The etiology and epidemiology of mental illness and problems of methodology: With special emphasis on schizophrenia. Ment. Hyg. 47(4). pp. 607-621.