



Social Mobility and Schizophrenia

Author(s): R. Jay Turner

Source: *Journal of Health and Social Behavior*, Vol. 9, No. 3, Special Issue on Psychiatry and Its Users (Sep., 1968), pp. 194-203

Published by: American Sociological Association

Stable URL: <https://www.jstor.org/stable/2948404>

Accessed: 19-12-2019 10:25 UTC

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



JSTOR

American Sociological Association is collaborating with JSTOR to digitize, preserve and extend access to *Journal of Health and Social Behavior*

Social Mobility and Schizophrenia*

R. JAY TURNER

Temple University

An ongoing study of the social and psychiatric correlates of successful performance and community tenure among schizophrenic males provided the opportunity to investigate the relationship between the direction and degree of social mobility and the occurrence of schizophrenic disorder. Analysis of the occupational movement of patients relative to their fathers indicated that schizophrenics tended to be more often and more severely downwardly mobile than a national comparison population. This relationship held both across and within social status categories. A comparison of alternative operations for estimating social status was used as a basis for reconciling apparently divergent findings. Analysis of the relationship between mobility and severity of disorder within the schizophrenic sample offered no evidence that social mobility could effectively distinguish these groups.

SINCE the publication of Faris and Dunham's (1939) classic work more than 25 years ago, considerable attention has been directed toward the questions of whether, in fact, mental illness generally and schizophrenia specifically are differentially distributed by social class and, if so, how this is to be explained. We have, during the past dozen years, witnessed publication of a substantial body of research addressed to the assessment of these questions (See Mishler and Scotch, 1965; Dunham, 1959; Parker and Kleiner, 1966). Although a true social-status gradient can hardly be assumed, even for schizophrenia, it now seems well established that schizophrenics are heavily overrepresented in the lowest stratum, whatever categories are used, and tend to be underrepresented in the highest (primarily managerial) category (Mishler and Scotch, 1965).

Most research on social mobility and schizophrenia has centered around one of two separate but interrelated issues. Both of these issues may be viewed as inferences or varying hypotheses directly derived from the assumption that there is a differential rate distribution of the disorder by

social status. The first issue concerns the social causation hypothesis versus the social selection-social drift hypothesis as contending explanations for the observed distributions. Briefly, this issue is whether social position is to be viewed as a *cause* or as a *consequence* of psychological disorder.

In research on this question, the study of social mobility is but a technique or approach for choosing between social-psychological hypotheses (e.g., social isolation, migration, or environmental deprivation or stress are causative of mental disorder) and hypotheses on a social system or social-structural level (e.g., the functioning of society tends to sort inadequate personalities into lower level positions and/or more disorganized subcultures).¹

The second focus of research in this area views mobility as a variable of importance in its own right. At issue is whether the stress associated with either upward or downward movement may be causally related to the development of schizophrenia.

THE SOCIAL CAUSATION AND SOCIAL SELECTION HYPOTHESES

In a prior paper dealing with the same survey data (Turner and Wagenfeld, 1967), the occupational mobility of our patients and that of a nonpatient national sample were used to compare the social causation and social selection explanations for our typical observation of an overrep-

¹For a discussion of social system level versus social psychological hypothesis, see Dunham (1959).

* This paper derives from a study supported by grant MH-09204 from the National Institute of Mental Health, R. Jay Turner, Ph.D., John Cumming, M.D., and Elmer Gardner, M.D., principal investigators. Computer analysis was supported, in part, by the National Science Foundation under Grant GP-1137. We are indebted to Dr. John Romano and the members of his department of psychiatry at the University of Rochester, without whose cooperation, assistance and commitment to social psychiatric research this study would not have been possible.

resentation of schizophrenics at the lowest occupational level. In attempting to uncover the source of this overrepresentation, it was determined that the fathers of the patients were also overrepresented at the lowest prestige level, but to a lesser degree. Although this finding was consistent with the social causation hypothesis and lends some general support to the view that social factors contribute to the occurrence of the disorder, it appeared to make only a minor contribution to the specific overrepresentation we sought to explain.

A detailed analysis of the movement of patients and controls, relative to their fathers, into and out of the lowest occupational category clearly indicated that the subject overrepresentation resulted primarily from downward mobility. Following this conclusion an effort was made to distinguish the relative contributions of social selection (referring to the failure of patients to ever attain expected levels) and social drift (referring to the movement from higher level jobs within one's own career) to the observed downward mobility. These analyses led to the conclusion that social selection is largely accountable for the downward shift, with social drift making little contribution.

It should be noted that, in the analyses summarized above, observations on occupational mobility were restricted to those patients and controls who originated and/or ended in the lowest occupational category (prestige level 7). No attempt was made to assess the general hypothesis of a relationship between mobility and the occurrence and severity of schizophrenic disorder.

SOCIAL MOBILITY AND SCHIZOPHRENIA

The proposition that social movement is associated with psychiatric difficulties was long ago expressed by both Sorokin (1927) and Warner (1937). Since that time it has been suggested that high mobility is accompanied by, or productive of, such things as interpersonal disturbances (Blau, 1956) and status inconsistencies or discrepancies (Lipset and Bendix, 1963). In each of these instances there is an implication that such disturbances are likely to be psychopathogenic. Thus, it has been widely as-

sumed that social mobility, whether upward or downward, contributes directly to the occurrence of mental disorder.

Although a substantial number of studies have been done that bear, in varying degrees, upon this general hypothesis, very few seem to have been undertaken with it specifically in mind. Moreover, when considered together, these investigations provide a rather confusing picture. While some studies have shown no important relationship between social mobility, regardless of direction, and mental illness (Hollingshead and Redlich, 1958; Lapouse, et al., 1956; Clausen and Kohn, 1959; Gerard and Houston, 1953), others report relationships with downward mobility only (Turner and Wagenfeld, 1967; Lystad, 1957; Goldberg and Morrison, 1963; Morris, 1959; Srole, et al., 1962; Dunham, 1965), and still others find an association between psychiatric disorder and upward social movement (Hollingshead, et al., 1954).

The present paper is addressed to the, admittedly, preliminary question of whether direction and degree of mobility can effectively distinguish schizophrenics from non-schizophrenics and between subgroups of differing severity of pathology within the schizophrenic population. These analyses will include evaluation of the relationship between social mobility and schizophrenia both across and within different status levels. In assessing the major hypothesis, the effects of differing techniques for estimating mobility will be evaluated by comparing results based upon alternative operations. These results will provide a basis for an attempt to reconcile the conflicting findings noted earlier.

THE STUDY

The data for this study were gathered by a group of investigators at the New York State Mental Health Research Unit in Syracuse, New York, and the Division of Preventive Psychiatry, University of Rochester, Department of Psychiatry. They are part of a four-year project which is studying the social and psychiatric correlates of successful performance and community tenure among schizophrenics. The sample for this study was drawn from the Monroe County (New York) Psychiatric

Case Register (Gardner, et al., 1963). Since its inception in January 1960, the Register has recorded almost all (95%) psychiatric contacts, whether diagnostic or treatment, inpatient or outpatient, public or private, that occurs within the county. This register thus provided a highly representative sampling base and, therein, a case-finding procedure for the diagnosed population that was quite independent of the variable of social position.² Moreover, an analysis of patterns of diagnostic assignment suggested that such assignment was independent of social status for this population (Turner and Wagenfeld, 1967).

Using the Psychiatric Case Register, a random sample of white, male schizophrenics, ages 20–50 was drawn, of whom 213 were later interviewed. A total of 82 cases (27.7% of the total sample) that met all sample criteria were lost to interview. Most of these were patient or family member refusals, while a small proportion of cases could not be traced. This sample was limited to those patients who had been reported to the Register for the first time between January 1, 1960, and June 30, 1963, had no history of psychiatric hospitalization prior to the initially reported contact, were living within the five-county area surrounding Monroe County, and had received a diagnosis of schizophrenia on one or more psychiatric contacts during the 3½-year period. The clinical status of included subjects ranged the full spectrum from those who were nearly asymptomatic to those who were severely impaired, and their total psychiatric experience varied from but a single outpatient visit to many lengthy periods of hospitalization.

Data sources for this study were the Psychiatric Case Register, two separate and independent ratings by psychiatrists, a social worker's report of an interview with a family member and a lengthy sociological questionnaire administered by a trained interviewer.

As part of their evaluation, interviewing psychiatrists completed a detailed symptom

² It should be emphasized that the claim of representativeness is made only in reference to detected schizophrenics. Whether our case finding procedures are really independent of social position depends, of course, upon the distribution of undiagnosed schizophrenia in the population.

check list, rated the patient on eight mental status dimensions and assigned an over-all pathology rating. This over-all rating was made on a 12-point scale ranging from minimal impairment (1–3) to marked impairment (10–12).³ To adequately assess the relationship between various social and outcome variables, it was clearly necessary to extract any joint variability deriving from severity of pathology. For this and other purposes, we desired an estimate of pathology that was not materially influenced by knowledge of the patient's social functioning or history of hospitalization. Since interviewing psychiatrists often could not avoid both learning of and being influenced by such facts, a blind rater was employed. This rater, a psychiatrist with substantial clinical experience, scored the 12-point pathology scale for each patient on the basis of the symptom check list completed by the interviewing psychiatrist. Aside from the symptom profile, the only information known to the blind rater was that the patient was a male between the ages of 20–50 and that he had on some occasion been diagnosed schizophrenic. The use of a blind rater provided a measure of severity of pathology that is relatively uninfluenced by knowledge of the patient's level of functioning. In the present paper these blind ratings are used in all analyses involving the variable of pathology.⁴

Estimates of social mobility. The sociological questionnaire was addressed to a large number of variables, among them the occupational and educational backgrounds of patients and patients' fathers. Although data on occupation and education were obtained for all patients, information on fathers is less complete. While in all but a few cases adequate data was obtained on fathers' occupations, reliable information on their educational attainment was frequently unavailable. These missing data

³ For a detailed description of the psychiatric instruments and a report of the levels of agreement between the two psychiatrists, see Hetzner, et al., (1966).

⁴ To check on the reliability of these ratings, a second blind rater was employed in the first 100 cases. Using Robinson's "A" (Robinson, 1957), our blind rater agreed with the second blind rater 0.87 and with the psychiatrist whose check list was used 0.91. By the same measure, the two interviewing psychiatrists agreed 0.85.

will be reflected in substantially reduced N sizes for analyses involving father's educational level.

The classification of occupations—a decidedly difficult problem in sociological research—was facilitated by the gathering of detailed information on title, work situation, and the characteristics of each subject's job. In addition, subjects were queried on their father's last or current job, his usual occupation, if different, and his occupation at about the time the patient was 16 years old.

The variables of occupation and education are those typically employed for indexing or estimating social mobility. Estimates of the patient's social class position are viewed in relation to that for his father in order to determine the direction and degree of intergenerational movement. The two most frequently used methods differ only in their means for estimating social position. One employs the Hollingshead Two Factor Index of Social Position (Hollingshead, 1952), which consists of a weighted score of occupation and education. The second utilizes only occupation as the indicator of social position. Data on occupation and education for both patients and their fathers were coded to allow analyses by both of these methods.

A meaningful interpretation of father-son status discrepancy data required a comparison population. Although the required father-son data were not available for the specific geographical area of our study, some data provided by Blau appeared to offer a suitable alternative. Based upon a 1962 census survey, Blau (1965) presents a table for a sample representing the 45 million American men between the ages of 20 and 64 in the civilian noninstitutionalized population. The data considered are the same as will be presented for our schiz-

ophrenic sample: subject's current or last occupation and occupation of father when subject was about 16 years old.

RESULTS AND DISCUSSION

To test the major question of whether direction and degree of mobility can effectively distinguish schizophrenics from non-schizophrenics, we first looked at the occupational prestige levels of sons in the patient and general samples in relation to that of their fathers. Each son was coded as upwardly mobile, nonmobile or downwardly mobile and in terms of the number of prestige level steps moved from his point of origin. Table 1 presents these data for the schizophrenic and comparison populations.

While the percentages that are nonmobile in the two populations are nearly identical, it is clear that in the schizophrenic group a substantially smaller number are upwardly mobile, and a substantially greater number are downwardly mobile, relative to their fathers, than is true of the general population. The degree of movement is clearly greatest among the upwardly mobile in the general sample while the opposite is true for the downward movers—the downwardly mobile schizophrenics showing, on the average, a more severe drop. Considering mobility, without reference to direction, these data provide no hint of any relationship between occupational mobility and the occurrence of schizophrenia. Indeed slightly greater total movement is observed in the general sample. When direction is considered, however, there is a broad trend, in terms of both the number of movers and the extent of movement, of relatively less upward movement and more downward movement within the schizophrenic population.

TABLE 1. DIRECTION AND MAGNITUDE OF OCCUPATIONAL MOBILITY FOR THE SCHIZOPHRENIC AND GENERAL SAMPLE

Direction and Movement	Schizophrenic		General Sample	
	Percent Mobile ^a	Mean Number Steps Moved	Percent Mobile ^a	Mean Number Steps Moved
Up	34.8	1.667	45.6	1.957
None	28.8	....	28.9	....
Down	36.4	1.806	25.5	1.677

^a By Chi-square $P < .001$.

These findings appear to directly contradict those of Hollingshead, Ellis and Kirby (1954) who report, at least for individuals at relatively high status levels, that schizophrenics were more upwardly mobile from parental level than nonpatients. While they found schizophrenics at the lowest level (Class 5) to be also upwardly mobile relative to their fathers, the extent of this movement did not differ significantly from that for the nonpatient group.

The findings of Hollingshead, Ellis and Kirby, taken with those reported in Table 1 above, might be taken to suggest that there is a varying relationship between social mobility and schizophrenia at different status levels. To check on this possibility the mobility patterns for our schizophrenic sample were compared with those of the general sample within occupational status categories (Table 2). Although the estimate of social position employed here uses only occupational prestige rather than the Two Factor Index utilized by Hollingshead,

Ellis and Kirby, their procedure of stratifying on patient's achieved status level is followed.

The prestige level categories most nearly equivalent to the social class III grouping employed by Hollingshead, Ellis and Kirby are those of minor professional and clerical-sales. All of the subjects in the schizophrenic sample who fall into Class III by the Two Factor Index have occupational prestige levels in one of these two categories. Considering only these categories, it may be seen that in the schizophrenic sample a substantially higher proportion of subjects ended in these categories as a result of moving upward relative to their fathers than was the case in the general sample. Taking the two prestige levels together, the average magnitude of such movement does not differ appreciably between the two samples. These data support the inference of Hollingshead, Ellis and Kirby that schizophrenic individuals at relatively high status levels have experienced more upward movement from parental level

TABLE 2. DIRECTION AND MAGNITUDE OF INTER-GENERATIONAL OCCUPATIONAL MOBILITY FOR THE SCHIZOPHRENIC AND GENERAL SAMPLES BY SON'S ACHIEVED OCCUPATIONAL PRESTIGE LEVEL

Direction of Movement	N	Schizophrenic		N	General Sample	
		Percent	Mean Number of Steps Moved		Percent	Mean Number of Steps Moved
		Son: Major & Lesser Professional				
Up	6	50.0	2.167	3502	82.9	2.605
Stable	6	50.0	.....	722	17.1	.....
Down		....	.....		....	.....
		Son: Minor Professional				
Up	14	77.7	2.357	2818	62.6	2.222
Stable	3	16.7	.....	1380	30.7	.....
Down	1	5.6	1.000	303	6.7	1.000
		Son: Clerical-Sales				
Up	29	67.4	1.517	2482	59.8	1.743
Stable	7	16.3	.....	575	13.9	.....
Down	7	16.3	1.429	1090	26.3	1.294
		Son: Skilled Manual				
Up	13	31.8	1.385	2540	44.5	1.206
Stable	23	56.1	.....	1993	34.8	.....
Down	5	12.1	1.600	1183	20.7	1.786
		Son: Semi-Skilled Manual				
Up	7	12.7	1.000	867	13.4	1.000
Stable	12	21.8	.....	2671	41.2	.....
Down	36	65.5	1.722	2941	45.4	1.774
		Son: Unskilled				
Up		....	.....		....	.....
Stable	6	20.7	.....	381	22.6	.....
Down	23	79.3	2.130	1306	77.4	1.836

TABLE 3. DIRECTION AND MAGNITUDE OF INTER-GENERATIONAL OCCUPATIONAL MOBILITY FOR THE SCHIZOPHRENIC AND GENERAL SAMPLES BY FATHER'S ACHIEVED OCCUPATIONAL PRESTIGE LEVEL

Direction of Movement	N	Schizophrenic		N	General Sample	
		Percent	Mean Number of Steps Moved		Percent	Mean Number of Steps Moved
Father: Major & Lesser Professional						
Up		....	.....		....	.....
Stable	6	46.2	.....	722	40.1	.....
Down	7	53.8	2.714	1079	59.9	2.457
Father: Minor Professional						
Up	2	11.1	1.000	940	21.7	1.000
Stable	3	16.7	.....	1380	31.8	.....
Down	13	72.2	2.308	2015	46.5	1.978
Father: Clerical-Sales						
Up	3	11.6	1.333	1294	46.2	1.503
Stable	7	26.9	.....	575	20.5	.....
Down	16	61.5	2.188	932	33.3	1.653
Father: Skilled Manual						
Up	27	33.7	1.481	2915	41.1	1.997
Stable	23	28.8	.....	1993	28.1	.....
Down	30	37.5	1.333	2181	30.8	1.214
Father: Semi-Skilled Manual						
Up	20	52.6	1.750	5059	60.6	2.119
Stable	12	31.6	.....	2671	32.0	.....
Down	6	15.8	1.000	616	7.4	1.000
Father: Unskilled						
Up	17	73.9	2.000	2001	84.0	2.108
Stable	6	26.1	.....	381	16.0	.....
Down		....	.....		....	.....

than is true of nonpatients. This finding, however, is misleading in reference to the hypothesis here under consideration. The presentation of the same data stratified by father's occupational prestige level as point of origin rather than *subject's* achieved status provides a demonstration. Table 3 presents this alternative organization of data. Inspection of this table leaves little doubt that, among the downwardly mobile, schizophrenics tend to suffer a more severe drop in status and, with the single exception of the highest occupational category, are considerably less likely to be upwardly mobile and more likely to be downwardly mobile. The fact that only 13 subjects are involved in this cell raises doubt that this should be regarded as a real exception. In short, the observation of less upward mobility and more downward mobility within the schizophrenic sample appears to hold both across and within social status groups. There is no evidence of a differential relationship between social mobility and schizophrenia at different status levels. Thus, while the

finding of Hollingshead, et al. (1954) tells us something about the distributions of the social status of fathers, it does not provide any information relative to the hypothesis of a relationship between social mobility and schizophrenic disorder.

Before attempting to interpret these findings in the context of those reported from prior research, let us consider briefly the consequences of employing the Hollingshead Two Factor Index rather than an estimate of social position based solely on occupational level.

Although information on the educational achievement of fathers of our schizophrenic sample was often unavailable, these data were obtained in 113 cases. Table 4 shows the intergenerational mobility patterns for subjects in this subsample based upon the Two Factor Index of Social Position and upon achieved occupational prestige level. It seems readily apparent that these two procedures lead to substantially divergent conclusions. The distribution under the Two Factor Index suggests

TABLE 4. INTER-GENERATIONAL SOCIAL MOBILITY WITHIN THE SCHIZOPHRENIC SAMPLE BY OCCUPATIONAL PRESTIGE LEVEL AND BY THE TWO FACTOR INDEX

Direction of Movement	Occupation Only		Two Factor Index	
	N	%	N	%
Up	33	29.2	36	31.9
None	34	30.1	47	41.6
Down	46	40.7	30	26.5
Total	113	100.0	113	100.0

either little mobility or a trend toward upward movement, while that based only on occupational prestige indicates a definite tendency for schizophrenics to be downwardly mobile relative to their fathers. This difference results from the general increase in the amount of education received by the present generation and the upward modification of educational requirements associated with various occupations. There is ample data (including that shown in Table 1 for the general sample) to indicate that there has also been an upward shift in the distribution of occupations over the generation considered. The magnitude of this shift, however, is by no means as striking as that for education.

Which of these two, or other, indexing operations is selected must, no doubt, be conditioned by one's conceptualization of the variable of social class. In making a selection, however, it is well to be aware of some of the possible attending consequences. We have already shown how differing procedures can produce importantly divergent results. An additional pertinent example is provided by Hollingshead, et al., (1954). The use of the Two Factor Index by these authors produced a finding for the schizophrenic as well as comparison populations that even those individuals whose own social class position was at the lowest possible level (Class V) were upwardly mobile relative to their fathers.⁵ Given the phenomenon of statistical regression, the substantive interpretation of this finding, to say the least, requires caution. In addition their report that the mean level of upward

⁵ The use of Two Factor raw scores rather than the five social class groupings made this mathematically possible.

movement did not differ between the schizophrenic and nonpatient samples as well as their series of subsequent conclusions, can hardly be taken seriously. After all, how variable can mean levels of upward movement be for populations whose endpoint is the lowest status category? Some additional examples of the effect on findings of different operationalizations of social status and mobility will be apparent in the following section.

RESOLVING CONFLICTING FINDINGS

It has been noted that studies dealing with social mobility and schizophrenia have tended to produce importantly divergent results. A careful evaluation of the major studies, however, with attention to matters of technique and procedure suggests that these disagreements may be more apparent than real. Let us first consider four major studies reporting no relationship between social mobility and schizophrenia. Two of these studies are ecological in design and two use more direct means for estimating social position and mobility. In the former category, both Gerard and Houston (1953) and Lapouse, et al., (1956) used patient's area of residence as an index of social position and changes in areas of residence as an estimate of social mobility. Neither study found downward social movement to be an important factor. Gerard and Houston, however, did find some suggestion of downward movement within that subgroup of schizophrenic men who lived in nonfamily settings. What must be noted here is that such studies are intragenerational since they consider social movement only within the patient's own life course. Their findings, therefore, do not conflict with those of the many studies showing downward intergenerational movement. Indeed, a number of studies reporting downward movement among schizophrenics relative to their fathers (Dunham, 1965; Lystad, 1957; Turner and Wagenfeld, 1967) could find no evidence of intragenerational social mobility. Only Goldberg and Morrison (1963) report significant amounts of both intergenerational and intragenerational downward movement within the schizophrenic population.

Although movement was measured in-

tergenerationally, neither Hollingshead and Redlich (1958) nor Clausen and Kohn, (1959) could find evidence of downward mobility in schizophrenics. Hollingshead and Redlich, of course, included education in their estimate of social position. It has already been argued that inclusion of education strongly favors the present generation in estimates of social position. That this factor provides an explanation for why Hollingshead and Redlich could not detect downward social movement is suggested by Goldberg and Morrison (1963). They observe that had they, as Hollingshead and Redlich, classified their patients on an index in which place of residence and education were included, the process of downward movement would have been obscured.

Only the Hagerstown study by Clausen and Kohn remains an exception to the finding of some relationship between mobility and schizophrenia that cannot be explained on procedural grounds. Their measure of movement was intergenerational and their index of social class was based only on occupation. Although their sample was small and their status categories exceedingly gross their failure to find downward social mobility or a differential distribution of schizophrenia by social class provides the suggestion that this relationship may not hold for small towns or rural areas.

Results suggesting that schizophrenics may be more upwardly mobile than comparison populations have been claimed by only one set of investigators (Hollingshead, et al., 1954). It has already been argued, however, that these findings: 1) can be understood, in part, in terms of the biasing effects introduced by changes in general educational level, and 2) do not, in any case, have any direct bearing upon the question of whether there is a relationship between social mobility and schizophrenia.

There seems little evidence to seriously contradict the findings presented in this paper. Indeed, it seems safe to conclude that a disproportionate number of schizophrenics exhibit downward social movement at least in relation to their fathers. Moreover, this tendency does not appear to differ materially across social status categories.

SOCIAL MOBILITY AND SEVERITY OF PATHOLOGY

Since social mobility does distinguish our schizophrenic subjects from a normal sample, it seems reasonable to propose that degree of social movement may also distinguish between subgroups of differing severity of pathology within the schizophrenic population. To test this hypothesis, the blind ratings of over-all pathology described earlier were used to organize subjects into four categories representing increasing levels of pathology. These groups were then compared in terms of mean intergenerational social movement (Table 5). Although the more severely ill are on the average downwardly mobile relative to their fathers, while those with lower pathology are on the average upwardly mobile, the difference between these mean mobility scores does not achieve statistical significance.

Two alternative explanations can be suggested for this failure to demonstrate the anticipated relationship. It may be that the pathology ratings made at the time of interview do not accurately reflect relative severity of disorder or premorbid condition at the time subjects were involved in active job competition. On the other hand, it may be that pre-schizophrenic characteristics or schizophrenic symptoms, regardless of severity, simply make it less probable that

TABLE 5. ANALYSIS OF VARIANCE FOR INTER-GENERATIONAL OCCUPATIONAL MOBILITY

Over-all Pathology	N	Mean	Source	DF	SS	MS	F
(Low) 1-3	28	.214	Between	3	15.4	5.133	1.934*
4-6	49	.265	Within	192	509.6	2.654	
7-9	67	-.149	Total	195	525.0		
(High) 10-12	52	-.442					
Total	196	-.071					

* $P > .10$.

the individual will achieve the expected occupational level.

CONCLUSIONS

In the foregoing discussion it has been contended that those studies which have not detected a relationship between schizophrenia and social mobility can, for the most part, be understood either in terms of the type of mobility measured or in relation to their particular operationalization of social status. Moreover, it is claimed that there is, in fact, no published evidence suggesting a relationship between upward social mobility and the occurrence of schizophrenia. The findings of the present study support those of most prior investigations of a relationship between the occurrence of the disorder and downward social movement. This relationship is not restricted to any special groupings, appearing rather to be quite uniform over social status categories.

The question of whether social mobility can be causally implicated in the development of schizophrenia is not, of course, answerable from the present data. Although the demonstration of a relationship between downward intergenerational mobility and schizophrenia maintains the plausibility of the notion of a causal relationship, it also provides support for a major alternative hypothesis. This hypothesis contends that failure of individuals diagnosed as schizophrenic to have ever achieved that level which might reasonably be expected, given their point of origin and the changing occupational structure, is due to the development of the disorder and not the reverse. Like the data out of which it grows, this latter hypothesis is social structural in character. It views the social system as acting to sift and sort the disordered, and those with premorbid personality characteristics of schizophrenics, into lower level and less demanding occupations. Rhinehart (1966) has argued that the test between these two alternative hypotheses requires longitudinal investigation to determine whether the disorder precedes or follows active competition for occupational achievement. Since, however, some degree of psychological deficit and general inefficiency is characteristic not only of schizophrenics

but very often of those who later become schizophrenic, the choice between these alternatives may be exceedingly difficult even in the context of careful longitudinal investigation. In our present state of knowledge the burden of proof would appear to lie with those who claim some etiological significance for social mobility.

REFERENCES

- Blau, P.
1956 "Social mobility and interpersonal relations." *American Sociological Review* 21 (June):290-295.
- Blau, P.
1965 "The flow of occupational supply and recruitment." *American Sociological Review* 30 (August):475-490.
- Clausen, J., and M. Kohn.
1959 "Relation of schizophrenia to the social structure of a small city." Pp. 69-86 in Benjamin Pasamanick (ed.), *Epidemiology of Mental Disorder*. Washington, D.C.: American Association for the Advancement of Science.
- Dunham, H. W.
1959 "Social structures and mental disorders: competing hypotheses of explanation." Pp. 227-265 in *Causes of Mental Disorders: A Review of Epidemiological Knowledge*. New York: Milbank Memorial Fund (1961).
- Dunham, H. Warren.
1965 *Community and Schizophrenia*. Detroit: Wayne State University Press.
- Faris, E. L. Robert, and H. Warren Dunham.
1939 *Mental Disorders in Urban Areas*. Chicago: University of Chicago Press.
- Gardner, E. A., H. C. Miles, H. P. Iker, and J. Romano.
1963 "A cumulative register of psychiatric services in a community." *American Journal of Public Health* 53 (August): 1269-1277.
- Gerard, D. L., and L. Houston.
1953 "Family setting and the social ecology of schizophrenia." *Psychiatric Quarterly* 27 (January):90-101.
- Goldberg, E. M., and S. L. Morrison.
1963 "Schizophrenia and social class." *British Journal of Psychiatry* 109 (November): 785-802.
- Hetznecker, W., E. A. Gardner, C. L. Odoroff, and R. J. Turner.
1966 "Field survey methods in psychiatry: A symptom check list, mental status and clinical status scales for evaluation of psychiatric impairment." *Archives of General Psychiatry* 15 (October):427-438.
- Hollingshead, A. B.
1952 "Two factor index of social position." New Haven: Mimeographed.

- Hollingshead, August B., and Fredrick C. Redlich.
1958 *Social Class and Mental Illness*. New York: John Wiley and Sons.
- Hollingshead, A. B., R. Ellis, and E. Kirby.
1954 "Social mobility and mental illness." *American Sociological Review* 19 (October):577-584.
- Lapouse, R., M. A. Monk, and M. Terris.
1956 "The drift hypothesis and socioeconomic differentials in schizophrenia." *American Journal of Public Health* 46 (August):978-986.
- Lipset, Seymour M., and Reinhard Bendix.
1963 *Social Mobility in Industrial Society*. Berkeley and Los Angeles: University of California Press.
- Lystad, M.
1957 "Social mobility among selected groups of schizophrenic patients." *American Sociological Review* 22 (June):288-292.
- Mishler, E. G., and N. A. Scotch
1965 "Sociocultural factors in the epidemiology of schizophrenia." *International Journal of Psychiatry* 1 (April):258-305.
- Morris, J. N.
1959 "Health and social class." *Lancet* (February):303-305.
- Parker, Seymour, and Robert J. Kleiner.
1966 *Mental Illness in the Urban Negro Community*. New York: The Free Press. Pp. 268-269.
- Rhinehart, J. W.
1966 "On diagnosed mental illness and social class (II)." *American Sociological Review* 31 (August):545-546.
- Robinson, W. S.
1957 "The statistical measurement of agreement." *American Sociological Review* 22 (February):17-25.
- Sorokin, Pitirim.
1927 *Social Mobility*. New York: Harper and Bros., p. 510.
- Srole, Leo, Thomas S. Langner, Stanley T. Michael, Marvin K. Opler, and Thomas A. C. Rennie.
1962 *Mental Health in the Metropolis*. New York: McGraw-Hill Book Company, Inc.
- Turner, R. J., and M. O. Wagenfeld.
1967 "Occupational mobility and schizophrenia: an assessment of the social causation and social selection hypotheses." *American Sociological Review* 32 (February):104-113.
- Warner, L. W.
1937 "The society, the individual and its mental disorders." *American Journal of Psychiatry* 94 (September):274-284.

Crises and Life Changes and the Onset of Schizophrenia *

GEORGE W. BROWN
*Bedford College,
University of London*

AND

J. L. T. BIRLEY
*Medical Research Council
Social Psychiatry Research Unit*

Patients with an acute onset of schizophrenia and their relatives were seen separately to establish the frequency of certain kinds of crisis and life change in the 13 weeks before onset. A general population group was seen for comparison. The two groups differed markedly in the proportion experiencing such changes in the 3-week period prior to onset (or to interview in the comparison group). Long-term tension in the home appeared to increase the chances of patients becoming disturbed after such changes.

THIS paper reports a further study in a series on the role of environmental factors in the course of schizophrenic disorders. The work has recently been reviewed by Brown (1967) and Wing (1967). Research so far has suggested that the quality of relationships at home can in-

fluence the course taken by the condition (Brown, 1959; Brown et al. 1962) and more sophisticated measures of family relationships have since been developed to pursue these findings (Brown and Rutter, 1966; Rutter and Brown, 1966).

In 1960 a pilot study suggested that both first and subsequent acute schizophrenic attacks were at times produced by clear-cut crises and life changes which most commonly occurred in the three weeks before the attack (Brown, 1960). The present in-

* The authors are grateful to the staff of the Bethlem Royal, Bexley, Cane Hill, Maudsley, St. Francis, St. Olave's, and St. Thomas's Hospitals for their permission to carry out this research and their generous co-operation during the work.