

Social Factors in the Selection of Therapy
in a Voluntary Mental Hospital

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Social Factors in the Selection of Therapy in a Voluntary Mental Hospital

Recent investigations have indicated a relationship between social class and psychiatric disorder with respect to type and incidence of mental illness (3, 5, 6, 13, 14), selection and maintenance of treatment (2, 6, 15), and therapeutic outcome (10). The present study is concerned with social factors in the selection of therapy in a voluntary mental hospital.

In the studies reported by Hollingshead, Redlich and their co-workers (3, 5, 6, 13, 15), the population of New Haven was divided into five social classes on the basis of weighted criteria of education, occupation and place of residence. Of the residents who were under psychiatric care, those from the upper social classes were more frequently treated with psychotherapy, while organic treatment or custodial care was more common among the lower classes. Of the psychotherapies, psychoanalysis was entirely restricted to the two upper groups. Social class was the predominant determinant of the type of treatment selected even when the diagnosis was held constant. They summarize their results as follows: "..... it is found that treatment does not depend on psychological and medical determinants alone, but on the status position of the patient as well. Psychotherapeutic methods are applied in disproportionately high degree to the upper social levels. The data of this study would seem to indicate that most psychotherapy takes place in a setting where the background of the patient is similar to that of the therapist" (15).

It is possible to relate the results obtained from these community studies to such selective factors as the patient's financial resources or the

extent and type of treatment facilities available. A more critical test of the importance of social factors affecting choice of treatment would be in a setting where the same therapeutic techniques and services are available to all patients.

This requirement is met at Hillside Hospital. It is a non-profit, non-sectarian institution for the treatment of voluntary patients with "early and curable mental symptoms" (4), who are admitted regardless of their ability to pay. One of the main criteria for accepting patients is their "ability to participate profitably in psychotherapy." Individual psychoanalytically oriented psychotherapy is regarded as the primary method of treatment with organic therapies available when needed. The average length of hospital stay is six months, although some patients remain for as long as a year.

The present investigation is an outgrowth of several years of study of electroshock therapy. In previous work it has been shown that certain aspects of personality were significantly related to patient selection and therapeutic efficacy of electroshock (8).

The purpose of the present study was to determine whether electroshock patients differ from those receiving other forms of treatment in regard to cultural background, including such factors as education and place of birth, and personality as measured by the California F scale (1); secondly, whether these factors were also related to referral for adjunctive hospital services.

METHOD:

Population: The entire in-patient adult population of Hillside Hospital as of March 7, 1957 was studied. This constituted a total of 172 patients, ranging in age from 16 to 68 with a mean of 34.6, and including 58 men and 114 women.

Procedure: 1) The population was subdivided into three groups according to type of treatment received, (a) electroshock therapy, (b) insulin coma therapy, and (c) psychotherapy only. *

2) The groups were compared for age, education and place of birth.

3) All patients were tested ** with a ten-item modification of the California F scale suggested by Levinson (9). The F scale is a questionnaire (see Appendix) which has been related to such factors as authoritarianism, acquiescence, ethnocentrism and rigidity (16). The patient reads ten statements and indicates whether he agrees or disagrees with each statement and to what extent. The score given for each item ranges from one to seven and the total score range is 10 to 70. The greater the agreement the higher the score obtained. The statements themselves are extreme, uncritical or stereotyped expressions.

* All patients are seen in psychotherapeutic sessions during hospitalization. Electroshock and insulin coma are administered as a supplement to this management. Seven patients received both EST and insulin and their data was included in both groups. In the results this makes a total of 179 subjects.

** As part of an ongoing study all the EST patients were tested with the F scale prior to treatment. In the case of those patients who were actually on EST on March 7th their pre-treatment scores were used in the statistical comparison since it had been found that EST significantly affects the score during treatment.

4) The population was subdivided in regard to utilization of certain adjunctive services in the hospital. Among such services available are group activities, occupational therapy, psychological testing and creative therapy. The latter is a diagnostic and therapeutic service consisting of a series of controlled painting procedures which are considered to be analogies of life experience (18). Psychological testing and creative therapy were selected for this study because both require a specific referral from the therapist.

RESULTS:

The data was analyzed as follows: 1) comparison of the treatment groups for age, education, F scale scores and place of birth, 2) comparison where diagnosis is held constant, 3) significance of length of hospitalization prior to treatment, and 4) comparison between groups referred for adjunctive hospital services.

I. Comparison of Treatment Groups:

For each of the three treatment groups the means and standard deviations for the F scale scores, age and years of schooling are presented in Table I. The EST group had higher F scores, was older and had fewer years of formal schooling than either the insulin or psychotherapy groups. These differences were statistically significant for F score and age but failed to reach statistical significance for education. The failure of years of education to differentiate the groups was due, in part, to the fact that the electroshock group contained many foreign born patients whose education was difficult to evaluate accurately. When treatment groups were subdivided into number of patients above and below eight years of education, the difference was significant at the .01 level. The insulin and psychotherapy groups did not differ statistically for any of these factors.

TABLE I

Comparison of Different Treatment Groups for F Score, Age, Education and Place of Birth

Group	F Score		Age		Years of Ed.		Years of Ed.		Place of Birth		Place of Foreign Birth	
	Mean	SD	Mean	SD	Mean	SD	Below 8	8 or more	Foreign Born	Native Born	Foreign Born, East. Europe	Other Foreign Born
EST (53)	44.5	15.6	41.3	14.02	10.08	4.9	9 (17%)	44 (83%)	18 (34%)	35 (66%)	16 (89%)	2 (11%)
Insulin (20)	31.5	13.3	26.6	4.8	13.1	2.6	1 (5%)	19 (95%)	2 (10%)	18 (90%)	2 (100%)	0
Psychotherapy (106)	34.8	14.8	32.3	14.1	12.0	3.2	4 (4%)	102 (96%)	18 (6%)	88 (94%)	5 (28%)	13 (72%)
	Mean Diff.	t	Mean Diff.	t	Mean Diff.	t	$\chi^2 = 7.97^*$		$\chi^2 = 7.79^*$		$\chi^2 = 11.73^{**}$	
EST-Insulin	13.0	3.11**	14.7	4.59***	2.3	6.90***						
EST-Psychotherapy	9.7	3.73	9.0	3.66***	1.2	1.66						
Insulin-Psychotherapy	3.3	.85	5.7	1.78	1.1	1.42						

* Significant at .05 level

** Significant at .01 level

*** Significant at .001 level

Both somatic groups had a higher percentage of foreign born patients than the psychotherapy group, with the electroshock group being highest of all. Among the foreign born patients, those who came from Eastern European countries received somatic therapy predominantly, while the majority of those from Western Europe received psychotherapy alone.

II. Comparison of Treatment Groups in Relation to Diagnosis:

The diagnostic categories of the patients in this study are comparable to those reported in previous studies of the hospital population (12). Of the 172 patients, 78 were classed as schizophrenic, 60 as psychotic depression, 32 as psychoneurosis and two with other diagnoses. As expected, a larger proportion of the depressed patients (52%) received electroshock than did those with other diagnoses. To control for the factor of diagnosis in choice of treatment, the psychotic depression patients were subdivided into those who received electroshock and those who were given psychotherapy alone. The results are shown in Table II.

While the two groups were comparable for age and education, the electroshock patients had a much higher mean F score, a difference significant at the .02 level of confidence. It is also demonstrated that a significantly higher proportion of the electroshock patients were born in Eastern Europe.

TABLE II

Comparison of Patients with Psychotic Depression who Received Different Types of Treatment

	<u>F Score</u>		<u>Age</u>		<u>Years of Educ.</u>		<u>Years of Educ.</u>		<u>Place of Birth</u>		
	Mean	SD	Mean	SD	Mean	SD	Below 8	8 or more	Native Born	Eastern Europe	Other
EST (31)	50.3	13.9	48.6	12.4	10.6	4.4	9 (29%)	22 (71%)	18 (58%)	12 (39%)	1 (3%)
Psychotherapy (29)	41.0	16.4	47.8	13.5	10.0	5.5	4 (14%)	25 (86%)	22 (76%)	3 (10%)	4 (14%)
EST-Psychotherapy	Mean Diff. 9.26	t 2.42*	Mean Diff. 0.82	t 0.25	Mean Diff. 0.60	t 0.48	$\chi^2 = 1.27$		$\chi^2 = 4.03 *$		

* Significant at .05 level

III. Comparison of Electroshock Patients According to Length of Hospitalization

Prior to Treatment:

While the electroshock patients, as a group, have been shown to differ from those receiving insulin or psychotherapy, there were still considerable intra-group differences. To account for some of these differences it was postulated that the same factors involved in selection of treatment were also related to the readiness with which a given patient was referred for electroshock. While most of the patients who received EST were placed on treatment less than three months after admission, about 40% were referred after a period of three to twelve months. In Table III the patients are compared according to the period of hospitalization prior to electroshock. Patients who had higher F scores and were older were treated earlier than the younger and lower F scale groups. Place of birth is also a significant factor. While 44% of those treated within three months were foreign born, all patients referred after a period of six months were born in the U.S. The data on education just fails of significance, although 28% of those treated earlier had less than eight years of education.

IV. Use of Adjunctive Hospital Services:

Comparison of the patients referred for creative therapy and psychological testing is shown in Table IV. It is clear that those referred for either of these procedures had significantly lower F scores, were younger in age, had more education and more were native born than patients who were not referred for these services.

TABLE III

Comparison of EST Patients According to Length of Hospitalization Prior to Treatment

Length of Hospitalization Prior to Treatment	F Score		Age		Years of Education		Years of Education		Place of Birth		
	Mean	SD	Mean	SD	Mean	SD	Below 8	8 or more	Native Born	Eastern Europe	Other
Less than 3 mos. (32)	49.1	14.0	45.6	13.5	9.8	5.7	9 (28%)	23 (72%)	18 (56%)	12 (38%)	2 (6%)
3 to 6 mos. (10)	42.7	11.2	39.8	12.5	11.7	2.8	1 (10%)	9 (90%)	7 (70%)	3 (30%)	0
More than 6 mos. (11)	33.9	17.3	30.1	10.9	12.9	2.0	0	11 (100%)	11 (100%)	0	0
	Mean Diff.	t	Mean Diff.	t	Mean Diff.	t	$\chi^2 = 4.88$		$\chi^2 = 6.15^*$		
Less than 3 mos. - 3 to 6 mos.	6.43	1.26	5.76	1.17	1.86	0.96					
Less than 3 mos. - more than 6 mos.	15.19	2.85**	15.47	3.38**	3.07	1.81					
3 to 6 mos. - more than 6 mos.	8.76	1.25	9.71	1.81	1.21	0.98					

* Significant at .05 level

** Significant at .01 level

TABLE IV

Comparison of Patients Referred for Adjunctive Services of Psychological Testing and Creative Therapy

Groups	F Score		Age		Years of Education		Years of Education		Place of Birth		
	Mean	SD	Mean	SD	Mean	SD	Below 8	8 or more	Native Born	Eastern Europe	Other
Creative Therapy (67)	29.5	10.9	28.7	10.1	13.6	3.5	1 (2%)	66 (98%)	61 (91%)	1 (2%)	5 (8%)
No Creative Therapy(105)	43.7	15.3	38.8	15.5	10.7	4.1	13 (12%)	92 (88%)	74 (71%)	23 (22%)	8 (8%)
									$\chi^2 = 5.25^*$		
Psychol. Tests (77)	33.1	14.8	30.7	11.2	12.2	3.9	2 (3%)	75 (97%)	64 (83%)	4 (5%)	9 (12%)
No Tests (95)	41.4	16.3	37.7	15.4	11.2	2.99	12 (13%)	83 (87%)	71 (75%)	18 (19%)	6 (6%)
									$\chi^2 = 8.36^*$		
C.T. - No C.T.	Mean Diff.	t	Mean Diff.	t	Mean Diff.	t	Mean Diff.	t	$\chi^2 = 4.52^*$		$\chi^2 = 8.29^*$
Psychol.- No Psychol.	14.2	6.36***	10.1	4.80***	2.9	8.7***					
	8.3	3.36**	7.0	5.26***	1.0	1.75					

* Significant at .05 level
 ** Significant at .01 level
 *** Significant at .001 level

DISCUSSION:

The results indicate that the factors of education, age, place of birth and F scale score were significantly related to the type of therapy received and to the utilization of adjunctive services in this hospital. Psychotherapy was the treatment of choice for those patients who were younger, better educated, native born and had lower F scores. Such patients were also referred more frequently for the auxiliary hospital services of psychological testing and creative therapy. Conversely, those patients who had higher F scale scores, were older, poorly educated and foreign born, particularly in Eastern Europe, were most likely to be referred for EST. These patients were infrequently referred for psychological tests or for creative therapy. Furthermore, these relationships were still significant when diagnosis was held constant.

These observations are compatible with those of Hollingshead, Redlich and their co-workers (3, 5, 6, 13, 15) who demonstrated that social factors are related to the type of therapy received in a community. The present study demonstrates that such factors are also significant in a hospital setting where ability to pay is not a criteria of therapeutic selection and where all forms of therapy are equally available to the entire population.

With financial aspects and the availability of therapeutic facilities eliminated in accounting for the relation of social factors to the selection of treatment, two alternative interpretations may be considered. The social factors may relate directly to the empirically established criteria for choice of therapy. On this basis a patient is referred for electroshock because he is older, poorly educated or foreign born, clinical experience having shown that

such persons respond best to this type of treatment. This explanation is inadequate since half the patients with psychotic depression received psychotherapy alone, even though electroshock is generally considered the treatment of choice for this illness.

An alternative interpretation is that social factors are related to choice of treatment because they also affect certain psychological patterns of behavior fundamental to conventional modes of therapy, such as mode of communication. Thus, a patient is not referred for electroshock because he is foreign born or poorly educated, but rather, these factors provide the difference in cultural background between patient and therapist which makes successful communication less likely in the psychotherapeutic relationship. Robinson et al. (15) in a study of psychoneurotic patients, have pointed out that psychotherapy is most likely to take place where the cultural background of the patient is similar to that of the therapist. Conversely, patient-therapist differences in systems of value and communication may hamper the establishment of a therapeutic relationship. In the present study, similarly, the patients who received psychotherapy alone were more like the therapists with regard to the factors studied.*

Apart from the problem of patient-therapist differences, certain patterns of communication exhibited by the patient may be intrinsically incompatible with the establishment of conventional psychotherapeutic relationships, particularly psychoanalytically oriented psychotherapy. Thus, our previous observations have

* The 18 therapists had a mean F score of 21.8 and a mean age of 33.9. Sixteen percent were born in Eastern Europe. Their mean years of education was over 20.

shown that verbally uncommunicative persons, prone to denial, evasion, stereotypy and use of cliches are likely to receive electroshock (7, 8). Such language patterns appear to be more frequent in persons with poorer socio-cultural backgrounds.

Social and cultural factors, in addition to their effect on communication patterns, may also determine the manifest symptomatology. Opler (11) has noted that, among patients diagnosed as schizophrenic, differences in symptoms are related to differences in cultural background. Frank et al. (2), studying psychoneurotic patients, reported that patients whose symptoms were expressed in somatic complaints were likely to leave psychotherapy, while those who remained had ideational symptoms. In a study of personality factors in electroshock patients (8) we have noted that certain patterns of symbolic value and communication were more likely to be associated with the development of a depressive psychosis. The relationship between communication pattern and symptoms indicates that symptoms themselves are a mode of communication.

The F scale furnishes a quantifiable index of attitude and communication patterns related to treatment selection. In a study of a mental hospital population, Levinson (9) found that high-scorers were less receptive to entering a psychotherapeutic relationship and were more likely to receive electroshock. Tougas (17), using an ethocentric scale similar to the F scale, found that psychotherapy was more effective in patients with low scores. In the present study the F scale was the most consistent factor differentiating the treatment groups.

These results have clinical as well as theoretical significance.

Preliminary observations from a study in progress indicate that low-scorers on the F scale have a poor response to electroshock, and that those with high F scores respond poorly to psychotherapy alone. Another clinical application may be in maximizing the communicative interaction between therapist and patient. This may be done by minimizing their social differences, by matching them more closely for age and place of birth. Of possible greater importance is the necessity for developing new modes of communication when treating patients who are refractory to conventional psychotherapeutic approaches.*

While epidemiological studies have clearly structured some of the problems involved in selection of treatment, and have indicated the direction of further study, it still remains for more process-oriented research to provide definitive answers.

* See Esecover's presentation of this topic in this issue.

SUMMARY:

1. In a study of social and personality factors affecting selection of therapy in a voluntary mental hospital, in which all forms of therapy were equally available, education, age, place of birth and score on the California F scale were significantly related to the type of therapy received and to the utilization of adjunctive hospital services.

2. Patients who were older, poorly educated, had higher F scores and were foreign born, particularly in Eastern Europe, were most likely to be referred for electroshock. Psychotherapy was the treatment of choice for those patients who most closely resembled the therapist in these aspects.

3. These relationships were present even when diagnosis was held constant.

4. Among the electroshock patients the same factors found to be significant in choice of therapy were also related to the readiness with which a patient was referred for electroshock.

5. It is postulated that treatment selection is the result of the communicative interaction between patient and therapist. Social factors may be important insofar as they are related to different modes of communication.

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APPENDIX

F SCALE FORM

Below are a number of statements. For each statement we want you to give us your personal opinion of whether you agree or disagree. Answer each statement according to one of the following:

I AGREE A LITTLE

I DISAGREE A LITTLE

I AGREE PRETTY MUCH

I DISAGREE PRETTY MUCH

I AGREE VERY MUCH

I DISAGREE VERY MUCH

1. No sane, normal, decent person could ever think of hurting a close friend or relation.

2. Science has its place, but there are many important things that must always be beyond human understanding.

3. If people would talk less and work more, everybody would be better off.

4. When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.

5. What the youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

6. Nowadays when so many different kinds of people mix together so much, a person has to protect himself especially carefully against catching an infection or disease from them.

7. Sex crimes, such as rape and attack on children, deserve more than mere imprisonment; such criminals ought to be publicly whipped, or worse.

8. The best teacher or boss is the one who tells us exactly what is to be done and how to go about it.

9. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

10. People can be divided into two distinct classes: the weak and the strong.

Sociopsychologic Aspects of Psychiatric Treatments
in a Voluntary Mental Hospital

Duration of Hospitalization, Discharge Ratings, and Diagnosis

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The increasing studies of the sociopsychological aspects of psychiatric treatment in recent years have primarily been concerned with treatment patterns in the community,¹² private practice,²⁹ and outpatient clinics.^{24,28} In the studies reported by Hollingshead, Redlich, and their co-workers^{12,27} it was found that social class was a major determinant of the type of psychiatric treatment in the New Haven community. Patients from the upper classes were more frequently treated with psychotherapy, while somatic or custodial care was commoner among the lower classes. They summarized their results by noting: "It was found that treatment does not depend on psychological and medical determinants alone, but on the status position of the patient as well."²⁷ Weinstock,²⁹ reporting the results of a poll of the American Psychoanalytic Association, observed that the patients being treated by their members in private practice came disproportionately from the better-educated, high-income population.

Similar findings have been noted in studies of outpatient facilities. Myers and Schaffer²⁴ showed that the higher a person's social class the more likely he was to be accepted for psychotherapy, treated by more highly trained personnel, and treated intensively over a long period of time. In another study Rosenthal and Frank²⁸

found almost a linear relationship between educational level and frequency of referral for psychotherapy.

A more critical test of the importance of sociopsychologic factors in relation to psychiatric treatment would be in a setting where the same therapeutic techniques and services were equally available to all patients. This requirement is met at Hillside Hospital, which is a nonprofit institution for the treatment of voluntary patients with "early and curable symptoms,"¹¹ who are admitted regardless of their ability to pay. One of the main criteria for accepting patients is their "ability to participate profitably in psychotherapy."¹¹ Individual psychoanalytically oriented psychotherapy is regarded as the primary method of treatment, with physiodynamic therapies available when needed. The average length of hospital stay is seven months, although some patients stay for more than a year.

In a previous study of the Hillside Hospital population,¹⁴ it was shown that the factors of age, education, place of birth, and degree of stereotypy, as measured by the California F Scale,¹ were related to the selection of therapy. Those patients who were older, had less education, were foreign-born, and had high scores on the F Scale were more likely to receive convulsive therapy. In contrast, patients who were younger, better-educated, and native-born and obtained low scores on the F Scale received psychotherapy as their sole form of treatment.

The purpose of the present study was to determine the relation of sociopsychological

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factors to (1) the duration of hospitalization, (2) the clinical evaluations at time of discharge, and (3) the final diagnosis.

Method

Population.—The entire inpatient adult population of Hillside Hospital on March 7, 1957, was studied. This consisted of 171 patients, 57 male and 114 female, ranging in age from 16 to 68 years, with a mean of 35 years.

Procedure.—The patients were divided according to the duration of hospitalization, clinical response to treatment, and diagnosis. The duration was determined by the number of complete months in the hospital. The clinical response and the diagnosis were determined by the medical director at a staff evaluation conference, usually held just prior to the patient's discharge. Each patient was rated as recovered, much improved, improved, or unimproved on the basis of the reports of the therapist, supervising psychiatrist, and milieu staff. The discharge diagnoses were divided into four major groups: involuntal psychosis, manic-depressive psychosis, schizophrenia, and psychoneurosis. These diagnostic categories included all but three patients in the population.

Each patient was tested with a 10-item modification of the California F Scale.²⁰ The F Scale is a questionnaire which has been related to such factors as authoritarianism, acquiescence, ethnocentrism, and rigidity.¹ The subject reads 10 statements and indicates to what extent he agrees or disagrees with each, i.e., "a little," "pretty much," or "very much." The score for each item ranges from 1 to 7, and the total score range is 10 to 70. High scores indicate greater agreement with the statements. These are extreme, uncritical, or stereotyped expressions. For example, one statement is this: "If people would talk less and work more, everybody would be better off."

Results

1. *Length of Hospitalization.*—In this population the duration of hospitalization ranged from 1 to 16 months, with a median of 7 months. For the purpose of analysis, the population was divided into three groups: 49 patients who were hospitalized for 1 to 5 months; 64, for 6 to 9 months, and 58 for 10 or more months.

The relation of sociopsychological factors to the length of hospitalization is shown in Table 1. The group of patients who were hospitalized for the shortest period had

TABLE 1.—Duration of Hospitalization: Total Population

Months in Hospital	No.	F Score, Mean	Age, Mean Yr.	Education, Mean Yr.	Foreign-Born
1 to 5	49	43.9	45.5	10.0	41%
6 to 9	64	40.1	32.5	11.9	19%
10 or more	58	31.0	27.9	12.8	10%
					$\chi^2=15.0 \dagger$
		Mean Differences	Mean Differences	Mean Differences	
		1 to 5 vs. 6 to 9	3.4	13.0 §	1.9 †
		1 to 5 vs. 10 or more	12.9 §	17.6 §	2.8 §
		6 to 9 vs. 10 or more	9.5 §	4.6 *	0.9

* $P < 0.05$.

† $P < 0.02$.

‡ $P < 0.01$.

§ $P < 0.001$.

the highest mean F scores, were oldest, and had the least education and the largest percentage of foreign-born. Conversely, the group in the hospital for 10 months or more had the lowest F scores, were youngest, and had the most education and the smallest percentage of foreign births. Patients who were hospitalized for an intermediate period fell in between these two groups for each of the factors.

When the data for those patients who received convulsive therapy (Table 2) and those who received psychotherapy (Table 3) as their only form of treatment were analyzed separately, similar relationships between sociopsychological factors and length of hospitalization were found within each group.

In the psychotherapy group there was an increase in mean years of education with greater months of hospitalization, but the differences fail of significance. It may be noted, however, that many of the patients who were in the hospital for 10 months or more were under 19 years of age and were thus unable to achieve more than a limited number of years of schooling.

These same relationships of sociopsychological factors to length of hospitalization were found when the patients were classi-

SOCIOPSYCHOLOGIC ASPECTS OF PSYCHIATRIC TREATMENT

TABLE 2.—Duration of Hospitalization: Patients Receiving Convulsive Therapy

Months in Hospital	No.	F Score, Mean	Age, Mean Yr.	Education, Mean Yr.	Foreign-Born
1 to 5	15	58.2	51.7	6.5	67%
6 to 9	17	45.6	42.2	12.3	24%
10 or more	25	34.9	32.1	13.2	16%
$\chi^2=12.0 \ddagger$					
		Mean Differences	Mean Differences	Mean Differences	
1 to 5 vs. 6 to 9		12.6 †	9.5 *	5.8 ‡	
1 to 5 vs. 10 or more		23.3 §	19.6 §	6.7 §	
6 to 9 vs. 10 or more		10.7 *	10.1 †	0.9	

* $P < 0.05$.
 † $P < 0.02$.
 ‡ $P < 0.01$.
 § $P < 0.001$.

fied according to four major diagnostic groups (Table 4). For each diagnostic class, the lowest F scores, youngest mean ages, most years of education, and least percentages of foreign-born were characteristic of patients hospitalized for the longest periods. As a group, patients diagnosed as schizophrenic were the most homogeneous in relation to time in the hospital, showing major differences only in the F score, without a consistent trend for the factors of education or place of birth.

2. Results of Treatment.—The relation of sociopsychological factors to evaluation on discharge is shown in Table 5. There

TABLE 3.—Duration of Hospitalization: Patients Receiving Psychotherapy Only

Months in Hospital	No.	F Score, Mean	Age, Mean Yr.	Education, Mean Yr.	Foreign-Born
1 to 5	33	40.2	43.2	11.4	30%
6 to 9	43	38.6	29.1	11.7	16%
10 or more	26	27.8	24.8	12.4	8%
$\chi^2=5.4$					
		Mean Differences	Mean Differences	Mean Differences	
1 to 5 vs. 6 to 9		1.6	14.1 *	0.3	
1 to 5 vs. 10 or more		12.4 *	18.4 *	1.0	
6 to 9 vs. 10 or more		10.8	4.3	0.7	

* $P=0.001$.

is a definite, almost linear, relationship between the ratings of improvement and these factors. Patients in the recovered group had the highest F scores, were oldest, least educated, and showed the highest incidence of foreign birth. In contrast, patients in the unimproved group had the lowest F scores, were younger, better educated, and were mostly native-born. Because of the wide variability within each group, however, only the factor of age reached a level of statistical significance. Education also significantly differentiated the groups when dichotomized according to those who had less than eight years of education and those who had eight years or more. Of the recovered patients, 29% had less than eight

TABLE 4.—Duration of Hospitalization in Patients Classified According to Diagnosis

Diagnosis	Months in Hospital	F Score, Mean	Age, Mean Yr.	Education, Mean Yr.	Foreign-Born
Involutional psychosis	1-5	58.2	58.8	7.1	57%
	6-9	50.9	54.5	9.6	43%
	10+	35.0	52.3	16.0	0
Manic-depressive psychosis	1-5	40.0	46.8	11.0	39%
	6-9	46.1	39.1	11.7	23%
	10+	33.1	35.5	12.3	0
Psychoneurosis	1-5	40.1	41.0	8.7	50%
	6-9	36.6	27.1	12.5	19%
	10+	36.1	27.1	12.5	13%
Schizophrenia	1-5	36.3	27.8	13.3	10%
	6-9	38.5	27.8	12.3	8%
	10+	27.6	24.1	12.9	12%

TABLE 5.—Discharge Evaluation

Evaluation	No.	F Score, Mean	Age, Mean Yr.	Education, Mean Yr.	Foreign-Born
Recovered.....	17	42.9	44.5	10.7	41%
Much improved.....	82	39.0	35.6	11.2	22%
Improved.....	63	36.1	31.2	11.2	16%
Unimproved.....	9	31.1	31.1	13.2	11%
					$\chi^2=6.1$
		Mean Differences	Mean Differences	Mean Differences	
Recovered vs. Much Improved.....		3.9	8.9 *	0.5	
Recovered vs. Improved.....		6.8	13.3 †	0.5	
Recovered vs. Unimproved.....		11.8	13.4 *	2.5	
Much Improved vs. Improved.....		2.9	4.4 †	0.0	
Much Improved vs. Unimproved.....		7.9	4.5	2.0	
Improved vs. Unimproved.....		5.0	0.1	2.0	

* $P<0.05$.

† $P<0.02$.

‡ $P<0.01$.

years' education, while all of the unimproved patients had more than eight years' education; the much improved and improved patients were in between. By χ^2 -analysis these results were significant at the 5% level of confidence.

When the data were analyzed for the patients treated with convulsive therapy, the trends noted for the population as a whole were intensified (Table 6). Analysis of the patients who received psychotherapy as their only form of treatment (Table 7), however, failed to show any statistically significant pattern. The recovered patients were oldest and had the highest percentage of foreign births, but education and F score did not show any clear trend.

3. *Diagnosis.*—The relation of sociopsychological factors to diagnosis is shown in Table 8. Those patients classified as showing involuntional reactions had the highest F scores, the oldest mean age, the least years of education, and the highest incidence of foreign birth. In contrast, patients classified as schizophrenic had the lowest F scores, the youngest mean age, the most years of education, and the least number of foreign-born. Patients classed in manic-depressive psychosis and psychoneurosis categories were in between with regard to these social factors.

Comment

The present study has demonstrated that sociopsychological factors, in addition to

TABLE 6.—Discharge Evaluation in Patients Receiving Convulsive Therapy

Evaluation	No.	F Score, Mean	Age, Mean Yr.	Education, Mean Yr.	Foreign-Born
Recovered.....	8	53.1	51.6	9.4	50%
Much improved.....	26	41.8	43.8	10.6	35%
Improved and unimproved.....	23	39.7	32.3	12.3	17%
					$\chi^2=3.5$
		Mean Differences	Mean Differences	Mean Differences	
Recovered vs. much improved.....		11.3	7.8	1.2	
Recovered vs. improved and unimproved.....		13.4 *	19.3 †	2.9 *	
Much improved vs. improved and unimproved.....		2.1	11.5 †	1.7	

* $P<0.05$.

† $P<0.02$.

‡ $P<0.001$.

SOCIOPSYCHOLOGIC ASPECTS OF PSYCHIATRIC TREATMENT

TABLE 7.—Discharge Evaluation in Patients Receiving Psychotherapy Only

Evaluation	No.	F Score, Mean	Age, Mean Yr.	Education, Mean Yr.	Foreign-Born
Recovered.....	9	32.6	38.2	12.3	33%
Much improved.....	54	38.1	32.2	12.0	15%
Improved and unimproved.....	39	33.5	31.9	12.2	18%
					$\chi^2=1.8$
		Mean Differences	Mean Differences	Mean Differences	
Recovered vs. much improved.....		5.5	6.0	0.3	
Recovered vs. improved and unimproved.....		0.9	6.3	0.1	
Much improved vs. improved and unimproved.....		4.6	0.3	0.2	

their previously determined importance in the selection of treatment, are also significantly related to the duration of treatment, the evaluation of the results of treatment, and the psychiatric diagnosis. If such results were obtained in a survey of private practitioners, as in the Weinstock report,²⁹ it could be concluded that the limitation of the number of practitioners and the expense of treatment served to select preferred persons from the upper social classes who could afford the treatment in terms of time and money. The present results, however, were obtained in an institution where the various kinds of treatment were equally available to all patients and where the ability to pay was not a factor in the management of the patient. We postulate, therefore, that

the observed relationships are not due merely to mechanically selective aspects, such as income or the prestige status of the patient. Social factors are important because they are also related to psychological processes, such as the habitual patterns of communication, modes of expression, and symbolic values. We shall attempt to evaluate these processes and their effect on the psychiatric relationships studied in terms of the influence of sociopsychological factors on the attitude and behavior of the therapist, the patient, and the therapist-patient interaction.

Current data both from this laboratory¹⁴ and from others^{12,24,27,28} have demonstrated that psychotherapy is most likely to be sustained with those persons who most

TABLE 8.—Diagnosis

Diagnosis	No.	F Score, Mean	Age, Mean Yr.	Education, Mean Yr.	Foreign-Born
Involuntional psychosis.....	24	52.3	56.7	8.9	46%
Manic-Depressive psychosis.....	39	40.8	41.9	11.5	26%
Psychoneurosis.....	37	36.9	29.4	11.9	22%
Schizophrenia.....	68	32.8	26.1	12.7	10%
					$\chi^2=14.2 \ddagger$
		Mean Differences	Mean Differences	Mean Differences	
Involuntional vs. Manic-depressive psychosis.....		11.5 †	14.8 §	2.0 *	
Involuntional psychosis vs. psychoneurosis.....		15.4 †	27.3 §	3.0 †	
Involuntional vs. schizophrenia.....		19.5 §	30.6 §	4.5 §	
Manic-depressive psychosis vs. psychoneurosis.....		3.9	12.5 §	0.4	
Manic-depressive psychosis vs. schizophrenia.....		8.0 †	15.8 §	1.6	
Psychoneurosis vs. schizophrenia.....		4.1	3.1	0.8	

* $P < 0.05$.
 † $P < 0.02$.
 ‡ $P < 0.01$.
 § $P < 0.001$.

closely resemble the therapists with regard to cultural background, systems of value, and communication patterns. With stress at Hillside Hospital on psychoanalytically oriented psychotherapy, it is consistent that those patients who are most like the therapists with regard to these factors would be kept in the hospital for the longest period. This was true for patients receiving convulsive therapy or psychotherapy and for all diagnostic groups.

The length of time a patient remains in a psychiatric facility is related to the particular function and philosophy of the institution. In studies of outpatient clinics which have a psychoanalytic orientation^{24,28} it has been observed that persons from the higher social classes, determined by education or income, are treated for a longer period. In contrast, in state mental hospitals, patients with the least education are kept longer and form a higher proportion of the chronically hospitalized group.^{6,17,23} The state-hospital therapist, viewing the institution primarily as a custodial facility,¹² is evidently oriented toward the more rapid discharge of those patients who come from a background most like his own.

The observation of the relation between sociopsychological factors and improvement rating, particularly in those patients receiving convulsive therapy, may also be related to differences in communication patterns between therapist and patient that result in referral for convulsive therapy. The therapist may set different criteria for improvement for the older, less educated patients than he does for the younger, more sophisticated ones. In the patient with little education and with modes of expression different from his own, he may regard, for example, the manifestation of denial or minimization of symptoms as improvement.¹⁵ But in patients culturally like himself, the expression of denial is regarded as a defensive operation, and the patient is considered unimproved.

Ratings of improvement are also related to the base line of premorbid functioning.

Thus, the rating of recovered is defined at Hillside Hospital as "the reasonable expectation that the patient will be able to return to his community and function as well, or better, than he did before he became ill."¹¹ The therapist's perception of the patient's premorbid functioning may be influenced by the distance between his value system and that of the patient's. The greater the social distance between therapist and patient the less rigorous the requirements for behavioral change may be. For example, for older, lower-class patients the ability to resume work may be the major criterion of improvement. For better-educated patients work adjustment may be one of many criteria, including such intangible aspects of behavior as insight, work gratification, and ease of sociability. The patient's expectancy not only of the type of psychiatric treatment but of improvement is also dependent upon social background.¹²

While the same trends were shown in the psychotherapy patients, the results did not reach the level of statistical significance. This may have been due to the greater homogeneity of these patients for the factors studied, in contrast to the convulsive group. The outpatient study by Rosenthal and Frank²⁸ also failed to find a relation between social factors and improvement rating in the patients who received psychotherapy. This observation, also, was obtained in a population that was more homogeneous after the initial admission selection process and after the spontaneous screening effected by the patient's willingness to attend treatment after he had been accepted.

The marked relationship between sociopsychological factors and diagnosis is not surprising. Certainly, the relationship of age and diagnosis is an established concept in clinical psychiatry. In the involutional disorders and in dementia precox the names themselves have a chronological connotation. Landis and Page,¹⁹ in 1938, stated that age was the "most important *single* deter-

mining factor that we can know about mental disease." They asserted that, given the age distribution of a group of patients, they could accurately predict the number in each diagnostic group, as well as the probable outcome with respect to recovery and the length of hospital residence. More recently, Frumkin,⁸ reporting the median ages of first admissions to a mental hospital in Ohio, observed data similar to our own with regard to the ages for the various diagnostic groups.

In the present study, however, we have also shown that education, place of birth, and F score significantly differentiate the major diagnostic groups in the hospital. In view of these findings, we have postulated that a psychiatric diagnosis is not just a one-to-one reflection of a specific type of behavior pattern but is also a value judgment in terms of social interaction. Thus, both in our own studies and in the work of others¹² it has been noted that patients with similar symptoms will receive different diagnoses, depending on their social background.

An additional hypothesis relating sociopsychologic factors to diagnosis may be based on the concept that persons from different social backgrounds acquire different habitual modes of adaptation, communication, and expression. Accordingly, under conditions of stress, altered brain function, or states associated with the onset of mental illness, a person will show those behavior patterns or symptoms which are similar to his habitual patterns. Thus, persons from a lower-class social background are more apt to communicate in nonverbal, physical terms, while upper-class people are more likely to do so in ideational and verbal modes. Thus, anger may be expressed by lower-class people by physical violence, while persons from the upper classes are more likely to resort to exhortation or argument.

Opler and Singer,²⁵ studying schizophrenic Irish and Italian patients in a Veteran's facility, found significant dif-

ferences in the types of symptoms related to cultural differences in the family backgrounds. Patients from Irish families in which the active expression of emotions were frowned upon and who had dominant, overprotective mothers, were passive, compliant, and withdrawn, and were fearful of anything which might separate them from the protection of the hospital. Patients with Italian family backgrounds that encouraged free expression of emotion and who were ruled by a dominant father, showed assaultive and destructive behavior, were difficult to manage, and were rebellious against authority.

In a comparable study, Miller and Swanson²² noted that hospitalized schizophrenic patients exhibited significant social-class difference in symptomatology. Lower-class patients showed a predominance of "motoric themes," while middle-class patients exhibited "conceptual or ruminative themes."

Hollingshead and Redlich¹² found a marked difference in the type of neuroses shown by persons from different social classes. While hysterical reactions were found predominantly at the lowest social levels, obsessive-compulsive patterns were characteristic of the upper classes. They felt that the lower-class patient expresses his neurosis by acting out, whereas the upper-class neurotic shows his symptoms in ideational dissatisfaction with himself.

According to our hypothesis, then, we should expect that persons from lower social levels would show symptoms that are nonverbal, and are expressed predominantly in sensory or motor patterns. Among such types of symptoms would be psychomotor retardation, anorexia, catatonic stupor, muteness, hysterical blindness, and paralysis. In this connection it is noteworthy that both hysteria and manic-depressive psychosis have been reported on the wane in the general population.^{2,4,8,10} This decrease, in our view, is related to the general increase in educational level of the country as a whole. One cannot, of course, ascribe

the decrease in hysteria to a greater freedom in sexual matters; hysteria is commonest in more poorly educated people, who are least inhibited sexually.¹⁶ Rees²⁶ has reported that those British soldiers who had hysterical symptoms in World War II were mainly the mental defectives. He noted that hysterical symptoms were related to intelligence and education. Freyhan⁷ has indicated not only that the present clinical patterns of hysteria are different from those shown at the turn of the century but that such schizophrenic manifestations as "cataleptic stupors, stereotypical motor peculiarities, grandiose excitement, and violent behavior" are difficult to find today. These observations suggest that a sociopsychological framework can lead to the prediction of future patterns of mental illness.

In our investigations of persons with depressive psychoses, we have frequently noted a pattern of premorbid behavior characterized by lack of imagination, creativity, and introspective capacity, and by conventionality and general rigidity.¹³ Similar patterns have been reported by other authors.^{3,5,9,21} We believe that a deprived cultural background, such as that involving little or no education, with the early years spent in an illiterate environment with meager cultural resources, is conducive to the development of such a personality pattern. When mentally disordered, such persons react with the repertoire of behavior patterns that we term "depression."

It is important to keep in mind that while the relationship between social factors and the psychiatric aspects described is probably applicable as a general principle, the specific findings may vary in different settings or institutions. For example, Hollingshead and Redlich¹² found that schizophrenia was a diagnosis proportionately commoner among the lower than among the upper classes, while at Hillside Hospital the schizophrenic patients had the highest education. This discrepancy may be related to differences in composition of the two populations, the Hillside patients being drawn largely from

the middle-class groups, with relatively few from the upper or lower social classes. In Hillside Hospital the diagnosis of schizophrenia may indicate an "interesting" patient, while in a state hospital population the same diagnosis may represent a patient who is "hopeless."

From the perspectives developed in this report, observations which are commonly explained in motivational and "dynamic" terms may also be understood in other ways. Thus, some situations where a patient is said to be "hostile" or "resisting psychotherapy" may reflect a problem in communication between patient and therapist, related to their differences in social background.

It also is apparent that the social background of the majority of the mentally ill patients is such as to make the current practice of universally employing a verbal, insightful-oriented therapeutic approach a difficult, if not inappropriate, procedure. The answer to the problem of how to treat the vast number of mentally ill may be not to train more and more psychotherapists, but, rather, to develop therapeutic techniques more suitable to the patient's own systems of value and communication.

Summary and Conclusions

Significant relationships were found between sociopsychological factors and duration of hospitalization, discharge evaluation, and diagnosis in a voluntary mental hospital.

Patients hospitalized for the shortest period were oldest, had the least education, were most likely to have been foreign-born, and had the highest scores on the California F Scale. Younger, native-born, more educated, and lower F-score patients were hospitalized the longest.

The same relationship of these factors to length of hospitalization was found when analyses were made according to type of treatment (convulsive therapy or psychotherapy) and diagnosis.

Discharge evaluations of improvement were significantly related to age, the older

patients having the more favorable ratings. Analysis of the data by type of treatment demonstrated that patients rated as recovered or much improved after convulsive therapy had the highest F scores, the least education, and were most likely to be foreign-born.

Diagnoses of schizophrenia or psychoneurosis were associated with lower F scores, younger ages, more education, and native birth. The older, less educated, foreign-born, high-F-score patients were most frequently classified under involuntional or manic-depressive psychosis.

It is postulated that these relationships reflect the influence of social background on psychological processes, such as the habitual patterns of communication, modes of expression, and symbolic values. These not only contribute to the pattern of mental illness but affect all aspects of the patient-therapist interaction.

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SOCIAL FACTORS IN THE SELECTION OF THERAPY IN A VOLUNTARY MENTAL HOSPITAL¹

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Recent investigations have indicated a relationship between social class and psychiatric disorder with respect to type and incidence of mental illness (3, 5, 6, 13, 14), selection and maintenance of treatment (2, 6, 15), and therapeutic outcome (10). The present study is concerned with social factors in the selection of therapy in a voluntary mental hospital.

In the studies reported by Hollingshead, Redlich, and their co-workers (3, 5, 6, 13, 15), the population of New Haven was divided into five social classes on the basis of weighted criteria of education, occupation and place of residence. Of the residents who were under psychiatric care, those from the upper social classes were more frequently treated with psychotherapy, while organic treatment or custodial care was more common among the lower classes. Of the psychotherapies, psychoanalysis was entirely restricted to the two upper groups. Social class was the predominant determinant of the type of treatment selected even when the diagnosis was held constant. They summarize their results as follows: ". . . it is found that treatment does not depend on psychological and medical determinants alone, but on the status position of the patient as well. Psychotherapeutic methods are applied in disproportionately high

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degree to the upper social levels. The data of this study would seem to indicate that most psychotherapy takes place in a setting where the background of the patient is similar to that of the therapist" (15).

It is possible to relate the results obtained from these community studies to such selective factors as the patient's financial resources or the extent and type of treatment facilities available. A more critical test of the importance of social factors affecting choice of treatment would be in a setting where the same therapeutic techniques and services are available to all patients.

This requirement is met at Hillside Hospital. It is a nonprofit, nonsectarian institution for the treatment of voluntary patients with "early and curable mental symptoms" (4), who are admitted regardless of their ability to pay. One of the main criteria for accepting patients is their "ability to participate profitably in psychotherapy." Individual psychoanalytically oriented psychotherapy is regarded as the primary method of treatment with organic therapies available when needed. The average length of hospital stay is six months, although some patients remain for as long as a year.

The present investigation is an outgrowth of several years of study of electroshock therapy. In previous work it has been shown that certain aspects of personality were significantly related to patient selection and therapeutic efficacy of electroshock (8).

The purpose of the present study was to determine whether electroshock patients differ from those receiving other forms of treatment in regard to cultural background, including such factors as education and place of birth, and personality as measured by the California F scale (1); secondly, whether these factors were also related to referral for adjunctive hospital services.

METHOD

Population: The entire inpatient adult population of Hillside Hospital as of March 7, 1957 was studied. This constituted a total of 172 patients, ranging in age from 16 to 68 with a mean of 34.6, and including 58 men and 114 women.

Procedure: (1) The population was subdivided into three groups according to type of treatment received, (a) electroshock therapy, (b) insulin coma therapy, and (c) psychotherapy only.⁵

⁵ All patients are seen in psychotherapeutic sessions during hospitalization. Electroshock and insulin coma are administered as a supplement to this management. Seven patients received both EST and insulin and their data were included in both groups. In the results this makes a total of 179 subjects.

(2) The groups were compared for age, education and place of birth.

(3) All patients were tested⁶ with a ten-item modification of the California F scale suggested by Levinson (9). The F scale is a questionnaire (see Appendix) which has been related to such factors as authoritarianism, acquiescence, ethnocentrism and rigidity (16). The patient reads ten statements and indicates whether he agrees or disagrees with each statement and to what extent. The score given for each item ranges from one to seven and the total score range is 10 to 70. The greater the agreement the higher the score obtained. The statements themselves are extreme, uncritical or stereotyped expressions.

(4) The population was subdivided in regard to utilization of certain adjunctive services in the hospital. Among such services available are group activities, occupational therapy, psychological testing and creative therapy. The latter is a diagnostic and therapeutic service consisting of a series of controlled painting procedures which are considered to be analogies of life experience (18). Psychological testing and creative therapy were selected for this study because both require a specific referral from the therapist.

RESULTS

The data were analyzed as follows: (1) comparison of the treatment groups for age, education, F scale scores, and place of birth; (2) comparison where diagnosis is held constant; (3) significance of length of hospitalization prior to treatment; and (4) comparison between groups referred for adjunctive hospital services.

1. *Comparison of Treatment Groups*

For each of the three treatment groups the means and standard deviations for the F scale scores, age and years of schooling are presented in Table 1. The EST group had higher F scores, was older and had fewer years of formal schooling than either the insulin or psychotherapy groups. These differences were statistically significant for F score and age but failed to reach statistical significance for education. The failure of years of education to differentiate the groups was due, in part, to the fact that the electroshock

⁶ As part of an ongoing study all the EST patients were tested with the F scale prior to treatment. In the case of those patients who were actually on EST on March 7 their pretreatment scores were used in the statistical comparison since it had been found that EST significantly affects the score during treatment.

group contained many foreign-born patients whose education was difficult to evaluate accurately. When treatment groups were subdivided into number of patients above and below eight years of education, the difference was significant at the .01 level. The insulin and psychotherapy groups did not differ statistically for any of these factors.

Both somatic groups had a higher percentage of foreign-born patients than the psychotherapy group, with the electroshock group being highest of all. Among the foreign-born patients, those who came from Eastern European countries received somatic therapy predominantly, while the majority of those from Western Europe received psychotherapy alone.

2. Comparison of Treatment Groups in Relation to Diagnosis

The diagnostic categories of the patients in this study are comparable to those reported in previous studies of the hospital population (12). Of the 172 patients, 78 were classed as schizophrenic, 60 as psychotic depression, 32 as psychoneurosis and 2 with other diagnoses. As expected, a larger proportion of the depressed patients (52%) received electroshock than did those with other diagnoses. To control for the factor of diagnosis in choice of treatment, the psychotic depression patients were subdivided into those who received electroshock and those who were given psychotherapy alone. The results are shown in Table 2.

While the two groups were comparable for age and education, the electroshock patients had a much higher mean F score, a difference significant at the .02 level of confidence. It is also demonstrated that a significantly higher proportion of the electroshock patients were born in Eastern Europe.

3. Comparison of Electroshock Patients According to Length of Hospitalization Prior to Treatment

While the electroshock patients, as a group, have been shown to differ from those receiving insulin or psychotherapy, there were still considerable intragroup differences. To account for some of these differences it was postulated that the same factors involved in selection of treatment were also related to the readiness with which a given patient was referred for electroshock. While most of the patients who received EST were placed on treatment less than three months after admission, about 40 per cent were referred after a period of three to twelve months. In Table 3 the patients are compared according to the period of hospitalization prior to electro-

TABLE 2
 Comparison of Patients with Psychotic Depression who Received Different Types of Treatment

	F Score		Age		Years of Ed.		Years of Education		Place of Birth		
	Mean	SD	Mean	SD	Mean	SD	Below 8	8 or more	Native-Born	Eastern Europe	Other
EST (31)	50.3	13.9	48.6	12.4	10.6	4.4	9 (29%)	22 (71%)	18 (58%)	12 (39%)	1 (3%)
Psychotherapy (29)	41.0	16.4	47.8	13.5	10.0	5.5	4 (14%)	25 (86%)	22 (76%)	3 (10%)	4 (14%)
	Mean Diff.	t	Mean Diff.	t	Mean Diff.	t	CHI ² = 1.27		CHI ² = 4.03*		
EST-Psychotherapy	9.26	2.42*	0.82	0.25	0.60	0.48					

* Significant at .05 level

TABLE 3
Comparison of EST Patients According to Length of Hospitalization Prior to Treatment

Length of Hospitalization Prior to Treatment	F Score		Age		Years of Ed.		Years of Education		Place of Birth		
	Mean	SD	Mean	SD	Mean	SD	Below 8	8 or more	Eastern Europe	Other	
Less than 3 mos. (32)	49.1	14.0	45.6	13.5	9.8	5.7	9 (28%)	23 (72%)	18 (56%)	12 (38%)	2 (6%)
3 to 6 mos. (10)	42.7	11.2	39.8	12.5	11.7	2.8	1 (10%)	9 (90%)	7 (70%)	3 (30%)	0
More than 6 mos. (11)	33.9	17.3	30.1	10.9	12.9	2.0	0	11 (100%)	11 (100%)	0	0
	Mean Diff.	t	Mean Diff.	t	Mean Diff.	t	CHI ² = 4.88		CHI ² = 6.15*		
Less than 3 mos.-3 to 6 mos.	6.43	1.26	5.76	1.17	1.86	0.96					
Less than 3 mos.-more than 6 mos.	15.19	2.85**	15.47	3.38**	3.07	1.81					
3 to 6 mos.-more than 6 mos.	8.76	1.25	9.71	1.81	1.21	0.98					

* Significant at .05 level

** Significant at .01 level

shock. Patients who had higher F scores and were older were treated earlier than the younger and lower F scale groups. Place of birth is also a significant factor. While 44 per cent of those treated within three months were foreign-born, all patients referred after a period of six months were born in the U. S. The data on education just fails of significance, although 28 per cent of those treated earlier had less than eight years of education.

4. *Use of Adjunctive Hospital Services*

Comparison of the patients referred for creative therapy and psychological testing is shown in Table 4. It is clear that those referred for either of these procedures had significantly lower F scores, were younger in age, had more education and more were native-born than patients who were not referred for these services.

DISCUSSION

The results indicate that the factors of education, age, place of birth, and F scale score were significantly related to the type of therapy received and to the utilization of adjunctive services in this hospital. Psychotherapy was the treatment of choice for those patients who were younger, better educated, native-born and had lower F scores. Such patients were also referred more frequently for the auxiliary hospital services of psychological testing and creative therapy. Conversely, those patients who had higher F scale scores, were older, poorly educated and foreign-born, particularly in Eastern Europe, were most likely to be referred for EST. These patients were infrequently referred for psychological tests or for creative therapy. Furthermore, these relationships were still significant when diagnosis was held constant.

These observations are compatible with those of Hollingshead, Redlich, and their co-workers (3, 5, 6, 13, 15) who demonstrated that social factors are related to the type of therapy received in a community. The present study demonstrates that such factors are also significant in a hospital setting where ability to pay is not a criterion of therapeutic selection and where all forms of therapy are equally available to the entire population.

With financial aspects and the availability of therapeutic facilities eliminated in accounting for the relation of social factors to the selection of treatment, two alternative interpretations may be considered. The social factors may relate directly to the empirically established criteria for choice of therapy. On this basis a patient is

TABLE 4
 Comparison of Patients Referred for Adjunctive Services of Psychological Testing and Creative Therapy

Groups	F Score		Age		Years of Ed.		Years of Education		Place of Birth	
	Mean	SD	Mean	SD	Mean	SD	Below 8	8 or more	Native-Born	Eastern Europe Other
Creative Therapy (67)	29.5	10.9	28.7	10.1	13.6	3.5	1 (2%)	66 (98%)	61 (91%)	1 (2%) 5 (8%)
No Creative Therapy (105)	43.7	15.3	38.8	15.5	10.7	4.1	13 (12%)	92 (88%)	74 (71%)	23 (22%) 8 (8%)
							CHI ² = 5.25*		CHI ² = 8.36*	
Psychol. Tests (77)	33.1	14.8	30.7	11.2	12.2	3.9	2 (3%)	75 (97%)	64 (83%)	4 (5%) 9 (12%)
No Tests (95)	41.4	16.3	37.7	15.4	11.2	2.99	12 (13%)	83 (87%)	71 (75%)	18 (19%) 6 (6%)
							CHI ² = 4.52*		CHI ² = 8.29*	
C.T. No C.T.	14.2	6.36***	10.1	4.80***	2.9	8.7***				
Psychol. No Psychol.	8.3	3.36**	7.0	5.26***	1.0	1.75				

* Significant at .05 level

** Significant at .01 level

*** Significant at .001 level

referred for electroshock because he is older, poorly educated or foreign-born, clinical experience having shown that such persons respond best to this type of treatment. This explanation is inadequate since half the patients with psychotic depression received psychotherapy alone, even though electroshock is generally considered the treatment of choice for this illness.

An alternative interpretation is that social factors are related to choice of treatment because they also affect certain psychological patterns of behavior fundamental to conventional modes of therapy, such as mode of communication. Thus, a patient is not referred for electroshock because he is foreign-born or poorly educated, but rather these factors provide the difference in cultural background between patient and therapist which makes successful communication less likely in the psychotherapeutic relationship. Robinson et al. (15), in a study of psychoneurotic patients, have pointed out that psychotherapy is most likely to take place where the cultural background of the patient is similar to that of the therapist. Conversely, patient-therapist differences in systems of value and communication may hamper the establishment of a therapeutic relationship. In the present study, similarly, the patients who received psychotherapy alone were more like the therapists with regard to the factors studied.⁷

Apart from the problem of patient-therapist differences, certain patterns of communication exhibited by the patient may be intrinsically incompatible with the establishment of conventional psychotherapeutic relationships, particularly psychoanalytically oriented psychotherapy. Thus, our previous observations have shown that verbally uncommunicative persons, prone to denial, evasion, stereotypy and use of clichés are likely to receive electroshock (7, 8). Such language patterns appear to be more frequent in persons with poorer sociocultural backgrounds.

Social and cultural factors, in addition to their effect on communication patterns, may also determine the manifest symptomatology. Opler (11) has noted that, among patients diagnosed as schizophrenic, differences in symptoms are related to differences in cultural background. Frank et al. (2), studying psychoneurotic patients, reported that patients whose symptoms were expressed in somatic complaints were likely to leave psychotherapy, while those who remained had ideational symptoms. In a study of personality

⁷ The 18 therapists had a mean F score of 21.8 and a mean age of 33.9. Sixteen per cent were born in Eastern Europe. Their mean years of education was over 20.

factors in electroshock patients (8) we have noted that certain patterns of symbolic value and communication were more likely to be associated with the development of a depressive psychosis. The relationship between communication pattern and symptoms indicates that symptoms themselves are a mode of communication.

The F scale furnishes a quantifiable index of attitude and communication patterns related to treatment selection. In a study of a mental hospital population, Levinson (9) found that high-scorers were less receptive to entering a psychotherapeutic relationship and were more likely to receive electroshock. Tougas (17), using an ethnocentric scale similar to the F scale, found that psychotherapy was more effective in patients with low scores. In the present study the F scale was the most consistent factor differentiating the treatment groups.

These results have clinical as well as theoretical significance. Preliminary observations from a study in progress indicate that low-scorers on the F scale have a poor response to electroshock, and that those with high F scores respond poorly to psychotherapy alone. Another clinical application may be in maximizing the communicative interaction between therapist and patient. This may be done by minimizing their social differences, by matching them more closely for age and place of birth. Of possible greater importance is the necessity for developing new modes of communication when treating patients who are refractory to conventional psychotherapeutic approaches.

While epidemiological studies have clearly structured some of the problems involved in selection of treatment, and have indicated the direction of further study, it still remains for more process-oriented research to provide definitive answers.

SUMMARY

1. In a study of social and personality factors affecting selection of therapy in a voluntary mental hospital, in which all forms of therapy were equally available, education, age, place of birth, and score on the California F scale were significantly related to the type of therapy received and to the utilization of adjunctive hospital services.

2. Patients who were older, poorly educated, had higher F scores and were foreign-born, particularly in Eastern Europe, were most likely to be referred for electroshock. Psychotherapy was the treat-

ment of choice for those patients who most closely resembled the therapist in these aspects.

3. These relationships were present even when diagnosis was held constant.

4. Among the electroshock patients the same factors found to be significant in choice of therapy were also related to the readiness with which a patient was referred for electroshock.

5. It is postulated that treatment selection is the result of the communicative interaction between patient and therapist. Social factors may be important in so far as they are related to different modes of communication.

APPENDIX

F SCALE FORM

Below are a number of statements. For each statement we want you to give us your *personal opinion* of whether you agree or disagree. Answer each statement according to one of the following:

I AGREE A LITTLE	I DISAGREE A LITTLE
I AGREE PRETTY MUCH	I DISAGREE PRETTY MUCH
I AGREE VERY MUCH	I DISAGREE VERY MUCH

1. No sane, normal, decent person could ever think of hurting a close friend or relation.

2. Science has its place, but there are many important things that must always be beyond human understanding.

3. If people would talk less and work more, everybody would be better off.

4. When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.

5. What the youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

6. Nowadays when so many different kinds of people mix together so much, a person has to protect himself especially carefully against catching an infection or disease from them.

7. Sex crimes, such as rape and attack on children, deserve more than mere imprisonment; such criminals ought to be publicly whipped, or worse.

8. The best teacher or boss is the one who tells us exactly what is to be done and how to go about it.

9. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

10. People can be divided into two distinct classes: the weak and the strong.

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Social Factors in the Selection of Therapy
in a Voluntary Mental Hospital

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Social Factors in the Selection of
Therapy in a Voluntary Mental Hospital

Recent investigations have indicated a relationship between social class and psychiatric disorder with respect to type and incidence of mental illness (3, 5, 6, 13, 14), selection and maintenance of treatment (2, 6, 15), and therapeutic outcome (10). The present study is concerned with social factors in the selection of therapy in a voluntary mental hospital.

In the studies reported by Hollingshead, Redlich and their co-workers (3, 5, 6, 13, 15), the population of New Haven was divided into five social classes on the basis of weighted criteria of education, occupation and place of residence. Of the residents who were under psychiatric care, those from the upper social classes were more frequently treated with psychotherapy, while organic treatment or custodial care was more common among the lower classes. Of the psychotherapies, psychoanalysis was entirely restricted to the two upper groups. Social class was the predominant determinant of the type of treatment selected even when the diagnosis was held constant. They summarize their results as follows: "..... it is found that treatment does not depend on psychological and medical determinants alone, but on the status position of the patient as well. Psychotherapeutic methods are applied in disproportionately high degree to the upper social levels. The data of this study would seem to indicate that most psychotherapy takes place in a setting where the background of the patient is similar to that of the therapist" (15).

It is possible to relate the results obtained from these community studies to such selective factors as the patient's financial resources or the

extent and type of treatment facilities available. A more critical test of the importance of social factors affecting choice of treatment would be in a setting where the same therapeutic techniques and services are available to all patients.

This requirement is met at Hillside Hospital. It is a non-profit, non-sectarian institution for the treatment of voluntary patients with "early and curable mental symptoms" (4), who are admitted regardless of their ability to pay. One of the main criteria for accepting patients is their "ability to participate profitably in psychotherapy." Individual psychoanalytically oriented psychotherapy is regarded as the primary method of treatment with organic therapies available when needed. The average length of hospital stay is six months, although some patients remain for as long as a year.

The present investigation is an outgrowth of several years of study of electroshock therapy. In previous work it has been shown that certain aspects of personality were significantly related to patient selection and therapeutic efficacy of electroshock (8).

The purpose of the present study was to determine whether electroshock patients differ from those receiving other forms of treatment in regard to cultural background, including such factors as education and place of birth, and personality as measured by the California F scale (1); secondly, whether these factors were also related to referral for adjunctive hospital services.

METHOD:

Population: The entire in-patient adult population of Hillside Hospital as of March 7, 1957 was studied. This constituted a total of 172 patients, ranging in age from 16 to 68 with a mean of 34.6, and including 58 men and 114 women.

Procedure: 1) The population was subdivided into three groups according to type of treatment received, (a) electroshock therapy, (b) insulin coma therapy, and (c) psychotherapy only. *

2) The groups were compared for age, education and place of birth.

3) All patients were tested ** with a ten-item modification of the California F scale suggested by Levinson (9). The F scale is a questionnaire (see Appendix) which has been related to such factors as authoritarianism, acquiescence, ethnocentrism and rigidity (16). The patient reads ten statements and indicates whether he agrees or disagrees with each statement and to what extent. The score given for each item ranges from one to seven and the total score range is 10 to 70. The greater the agreement the higher the score obtained. The statements themselves are extreme, uncritical or stereotyped expressions.

* All patients are seen in psychotherapeutic sessions during hospitalization. Electroshock and insulin coma are administered as a supplement to this management. Seven patients received both EST and insulin and their data was included in both groups. In the results this makes a total of 179 subjects.

** As part of an ongoing study all the EST patients were tested with the F scale prior to treatment. In the case of those patients who were actually on EST on March 7th their pre-treatment scores were used in the statistical comparison since it had been found that EST significantly affects the score during treatment.

4) The population was subdivided in regard to utilization of certain adjunctive services in the hospital. Among such services available are group activities, occupational therapy, psychological testing and creative therapy. The latter is a diagnostic and therapeutic service consisting of a series of controlled painting procedures which are considered to be analogies of life experience (18). Psychological testing and creative therapy were selected for this study because both require a specific referral from the therapist.

RESULTS:

The data was analyzed as follows: 1) comparison of the treatment groups for age, education, F scale scores and place of birth, 2) comparison where diagnosis is held constant, 3) significance of length of hospitalization prior to treatment, and 4) comparison between groups referred for adjunctive hospital services.

I. Comparison of Treatment Groups:

For each of the three treatment groups the means and standard deviations for the F scale scores, age and years of schooling are presented in Table I. The EST group had higher F scores, was older and had fewer years of formal schooling than either the insulin or psychotherapy groups. These differences were statistically significant for F score and age but failed to reach statistical significance for education. The failure of years of education to differentiate the groups was due, in part, to the fact that the electroshock group contained many foreign born patients whose education was difficult to evaluate accurately. When treatment groups were subdivided into number of patients above and below eight years of education, the difference was significant at the .01 level. The insulin and psychotherapy groups did not differ statistically for any of these factors.

TABLE I

Comparison of Different Treatment Groups for F Score, Age, Education and Place of Birth

Group	F Score		Age		Years of Ed.		Years of Ed.		Place of Birth		Place of Foreign Birth	
	Mean	SD	Mean	SD	Mean	SD	Below 8	8 or more	Foreign Born	Native Born	Foreign Born, East. Europe	Other Foreign Born
EST (53)	44.5	15.6	41.3	14.02	10.08	4.9	9 (17%)	44 (83%)	18 (34%)	35 (66%)	16 (89%)	2 (11%)
Insulin (20)	31.5	13.3	26.6	4.8	13.1	2.6	1 (5%)	19 (95%)	2 (10%)	18 (90%)	2 (100%)	0
Psycho-therapy (106)	34.8	14.8	32.3	14.1	12.0	3.2	4 (4%)	102 (96%)	18 (6%)	88 (94%)	5 (28%)	13 (72%)
	Mean Diff.	t	Mean Diff.	t	Mean Diff.	t	$X^2 = 7.97^*$		$X^2 = 7.79^*$		$X^2 = 11.73^{**}$	
EST-Insulin	13.0	3.11**	14.7	4.59***	2.3	6.90***						
EST-Psycho-therapy	9.7	3.73	9.0	3.66***	1.2	1.66						
Insulin-Psycho-therapy	3.3	.85	5.7	1.78	1.1	1.42						

* Significant at .05 level

** Significant at .01 level

*** Significant at .001 level

Both somatic groups had a higher percentage of foreign born patients than the psychotherapy group, with the electroshock group being highest of all. Among the foreign born patients, those who came from Eastern European countries received somatic therapy predominantly, while the majority of those from Western Europe received psychotherapy alone.

II. Comparison of Treatment Groups in Relation to Diagnosis:

The diagnostic categories of the patients in this study are comparable to those reported in previous studies of the hospital population (12). Of the 172 patients, 78 were classed as schizophrenic, 60 as psychotic depression, 32 as psychoneurosis and two with other diagnoses. As expected, a larger proportion of the depressed patients (52%) received electroshock than did those with other diagnoses. To control for the factor of diagnosis in choice of treatment, the psychotic depression patients were subdivided into those who received electroshock and those who were given psychotherapy alone. The results are shown in Table II.

While the two groups were comparable for age and education, the electroshock patients had a much higher mean F score, a difference significant at the .02 level of confidence. It is also demonstrated that a significantly higher proportion of the electroshock patients were born in Eastern Europe.

TABLE II

Comparison of Patients with Psychotic Depression who Received Different Types of Treatment

	<u>F Score</u>		<u>Age</u>		<u>Years of Educ.</u>		<u>Years of Educ.</u>		<u>Place of Birth</u>		
	Mean	SD	Mean	SD	Mean	SD	Below 8	8 or more	Native Born	Eastern Europe	Other
EST (31)	50.3	13.9	48.6	12.4	10.6	4.4	9 (29%)	22 (71%)	18 (58%)	12 (39%)	1 (3%)
Psychotherapy (29)	41.0	16.4	47.8	13.5	10.0	5.5	4 (14%)	25 (86%)	22 (76%)	3 (10%)	4 (14%)
EST-Psychotherapy	Mean Diff. 9.26	t 2.42*	Mean Diff. 0.82	t 0.25	Mean Diff. 0.60	t 0.48	$\chi^2 = 1.27$		$\chi^2 = 4.03 *$		

* Significant at .05 level

III. Comparison of Electroshock Patients According to Length of Hospitalization

Prior to Treatment:

While the electroshock patients, as a group, have been shown to differ from those receiving insulin or psychotherapy, there were still considerable intra-group differences. To account for some of these differences it was postulated that the same factors involved in selection of treatment were also related to the readiness with which a given patient was referred for electroshock. While most of the patients who received EST were placed on treatment less than three months after admission, about 40% were referred after a period of three to twelve months. In Table III the patients are compared according to the period of hospitalization prior to electroshock. Patients who had higher F scores and were older were treated earlier than the younger and lower F scale groups. Place of birth is also a significant factor. While 44% of those treated within three months were foreign born, all patients referred after a period of six months were born in the U.S. The data on education just fails of significance, although 28% of those treated earlier had less than eight years of education.

IV. Use of Adjunctive Hospital Services:

Comparison of the patients referred for creative therapy and psychological testing is shown in Table IV. It is clear that those referred for either of these procedures had significantly lower F scores, were younger in age, had more education and more were native born than patients who were not referred for these services.

TABLE III

Comparison of EST Patients According to Length of Hospitalization Prior to Treatment

Length of Hospitalization Prior to Treatment	F Score		Age		Years of Education		Years of Education		Place of Birth		
	Mean	SD	Mean	SD	Mean	SD	Below 8	8 or more	Native Born	Eastern Europe	Other
Less than 3 mos. (32)	49.1	14.0	45.6	13.5	9.8	5.7	9 (28%)	23 (72%)	18 (56%)	12 (38%)	2 (6%)
3 to 6 mos. (10)	42.7	11.2	39.8	12.5	11.7	2.8	1 (10%)	9 (90%)	7 (70%)	3 (30%)	0
More than 6 mos. (11)	33.9	17.3	30.1	10.9	12.9	2.0	0	11 (100%)	11 (100%)	0	0
	Mean Diff.	t	Mean Diff.	t	Mean Diff.	t	$\chi^2 = 4.88$		$\chi^2 = 6.15^*$		
Less than 3 mos. - 3 to 6 mos.	6.43	1.26	5.76	1.17	1.86	0.96					
Less than 3 mos. - more than 6 mos.	15.19	2.85**	15.47	3.38**	3.07	1.81					
3 to 6 mos. - more than 6 mos.	8.76	1.25	9.71	1.81	1.21	0.98					

* Significant at .05 level

** Significant at .01 level

TABLE IV

Comparison of Patients Referred for Adjunctive Services of Psychological Testing and Creative Therapy

Groups	F Score		Age		Years of Education		Years of Education		Place of Birth		
	Mean	SD	Mean	SD	Mean	SD	Below 8	8 or more	Native Born	Eastern Europe	Other
Creative Therapy (67)	29.5	10.9	28.7	10.1	13.6	3.5	1 (2%)	66 (98%)	61 (91%)	1 (2%)	5 (8%)
No Creative Therapy (105)	43.7	15.3	38.8	15.5	10.7	4.1	13 (12%)	92 (88%)	74 (71%)	23 (22%)	8 (8%)
							$\chi^2 = 5.25^*$		$\chi^2 = 8.36^*$		
Psychol. Tests (77)	33.1	14.8	30.7	11.2	12.2	3.9	2 (3%)	75 (97%)	64 (83%)	4 (5%)	9 (12%)
No Tests (95)	41.4	16.3	37.7	15.4	11.2	2.99	12 (13%)	83 (87%)	71 (75%)	18 (19%)	6 (6%)
C.T. - No C.T.	Mean Diff.	t	Mean Diff.	t	Mean Diff.	t	$\chi^2 = 4.52^*$		$\chi^2 = 8.29^*$		
Psychol.- No Psychol.	14.2	6.36***	10.1	4.80***	2.9	8.7***					
	8.3	3.36***	7.0	5.26***	1.0	1.75					

* Significant at .05 level

** Significant at .01 level

*** Significant at .001 level

DISCUSSION:

The results indicate that the factors of education, age, place of birth and F scale score were significantly related to the type of therapy received and to the utilization of adjunctive services in this hospital. Psychotherapy was the treatment of choice for those patients who were younger, better educated, native born and had lower F scores. Such patients were also referred more frequently for the auxiliary hospital services of psychological testing and creative therapy. Conversely, those patients who had higher F scale scores, were older, poorly educated and foreign born, particularly in Eastern Europe, were most likely to be referred for EST. These patients were infrequently referred for psychological tests or for creative therapy. Furthermore, these relationships were still significant when diagnosis was held constant.

These observations are compatible with those of Hollingshead, Redlich and their co-workers (3, 5, 6, 13, 15) who demonstrated that social factors are related to the type of therapy received in a community. The present study demonstrates that such factors are also significant in a hospital setting where ability to pay is not a criteria of therapeutic selection and where all forms of therapy are equally available to the entire population.

With financial aspects and the availability of therapeutic facilities eliminated in accounting for the relation of social factors to the selection of treatment, two alternative interpretations may be considered. The social factors may relate directly to the empirically established criteria for choice of therapy. On this basis a patient is referred for electroshock because he is older, poorly educated or foreign born, clinical experience having shown that

such persons respond best to this type of treatment. This explanation is inadequate since half the patients with psychotic depression received psychotherapy alone, even though electroshock is generally considered the treatment of choice for this illness.

An alternative interpretation is that social factors are related to choice of treatment because they also affect certain psychological patterns of behavior fundamental to conventional modes of therapy, such as mode of communication. Thus, a patient is not referred for electroshock because he is foreign born or poorly educated, but rather, these factors provide the difference in cultural background between patient and therapist which makes successful communication less likely in the psychotherapeutic relationship. Robinson et al. (15) in a study of psychoneurotic patients, have pointed out that psychotherapy is most likely to take place where the cultural background of the patient is similar to that of the therapist. Conversely, patient-therapist differences in systems of value and communication may hamper the establishment of a therapeutic relationship. In the present study, similarly, the patients who received psychotherapy alone were more like the therapists with regard to the factors studied.*

Apart from the problem of patient-therapist differences, certain patterns of communication exhibited by the patient may be intrinsically incompatible with the establishment of conventional psychotherapeutic relationships, particularly psychoanalytically oriented psychotherapy. Thus, our previous observations have

* The 18 therapists had a mean F score of 21.8 and a mean age of 33.9. Sixteen percent were born in Eastern Europe. Their mean years of education was over 20.

shown that verbally uncommunicative persons, prone to denial, evasion, stereotypy and use of cliches are likely to receive electroshock (7, 8). Such language patterns appear to be more frequent in persons with poorer socio-cultural backgrounds.

Social and cultural factors, in addition to their effect on communication patterns, may also determine the manifest symptomatology. Opler (11) has noted that, among patients diagnosed as schizophrenic, differences in symptoms are related to differences in cultural background. Frank et al. (2), studying psychoneurotic patients, reported that patients whose symptoms were expressed in somatic complaints were likely to leave psychotherapy, while those who remained had ideational symptoms. In a study of personality factors in electroshock patients (8) we have noted that certain patterns of symbolic value and communication were more likely to be associated with the development of a depressive psychosis. The relationship between communication pattern and symptoms indicates that symptoms themselves are a mode of communication.

The F scale furnishes a quantifiable index of attitude and communication patterns related to treatment selection. In a study of a mental hospital population, Levinson (9) found that high-scorers were less receptive to entering a psychotherapeutic relationship and were more likely to receive electroshock. Tougas (17), using an ethocentric scale similar to the F scale, found that psychotherapy was more effective in patients with low scores. In the present study the F scale was the most consistent factor differentiating the treatment groups.

These results have clinical as well as theoretical significance.

Preliminary observations from a study in progress indicate that low-scorers on the F scale have a poor response to electroshock, and that those with high F scores respond poorly to psychotherapy alone. Another clinical application may be in maximizing the communicative interaction between therapist and patient. This may be done by minimizing their social differences, by matching them more closely for age and place of birth. Of possible greater importance is the necessity for developing new modes of communication when treating patients who are refractory to conventional psychotherapeutic approaches.*

While epidemiological studies have clearly structured some of the problems involved in selection of treatment, and have indicated the direction of further study, it still remains for more process-oriented research to provide definitive answers.

* See Esecover's presentation of this topic in this issue.

SUMMARY:

1. In a study of social and personality factors affecting selection of therapy in a voluntary mental hospital, in which all forms of therapy were equally available, education, age, place of birth and score on the California F scale were significantly related to the type of therapy received and to the utilization of adjunctive hospital services.

2. Patients who were older, poorly educated, had higher F scores and were foreign born, particularly in Eastern Europe, were most likely to be referred for electroshock. Psychotherapy was the treatment of choice for those patients who most closely resembled the therapist in these aspects.

3. These relationships were present even when diagnosis was held constant.

4. Among the electroshock patients the same factors found to be significant in choice of therapy were also related to the readiness with which a patient was referred for electroshock.

5. It is postulated that treatment selection is the result of the communicative interaction between patient and therapist. Social factors may be important insofar as they are related to different modes of communication.

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APPENDIX

F SCALE FORM

Below are a number of statements. For each statement we want you to give us your personal opinion of whether you agree or disagree. Answer each statement according to one of the following:

I AGREE A LITTLE

I DISAGREE A LITTLE

I AGREE PRETTY MUCH

I DISAGREE PRETTY MUCH

I AGREE VERY MUCH

I DISAGREE VERY MUCH

1. No sane, normal, decent person could ever think of hurting a close friend or relation.

2. Science has its place, but there are many important things that must always be beyond human understanding.

3. If people would talk less and work more, everybody would be better off.

4. When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.

5. What the youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

6. Nowadays when so many different kinds of people mix together so much, a person has to protect himself especially carefully against catching an infection or disease from them.

7. Sex crimes, such as rape and attack on children, deserve more than mere imprisonment; such criminals ought to be publicly whipped, or worse.

8. The best teacher or boss is the one who tells us exactly what is to be done and how to go about it.

9. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

10. People can be divided into two distinct classes: the weak and the strong.