

# Severity in the Functional Psychoses

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## Introduction

How is the severity of a functional psychosis determined? Severity is often judged according to the presence of certain symptoms among those which led to a classification of a psychosis.<sup>1,2</sup>

Assumptions about prognosis may influence, however, whether a diagnosis of greater or lesser severity is assigned. For example, by definition, the schizophrenic reaction, chronic undifferentiated type, is likely to be given to patients, not because of particular symptoms but because they have failed to recover after a long period of symptomatic behavior. The schizophrenic reaction, acute undifferentiated type, is assigned when the symptoms are a recent manifestation.

At the hospital where the writer did research, a decision between the paranoid and manic diagnoses sometimes included consideration of the patient's potential for recovery. Consideration of prognosis also inhibited the assignment of the hebephrenic category to patients admitted for the first time to the hospital. Generally, hindsight guided staff's evaluation of severity rather than something specific about patients' symptoms. In particular, patients a long time in the hospital were considered "very sick" by that fact, rather

than necessarily anything about their symptoms.

The use of a prediction about prognosis as a guide to diagnosis is the basis for the theoretical distinction often made between a process schizophrenia, resistant to cure and thought to be firmly fixed in the personality, and a reactive schizophrenia, transitory and overlying a relatively normal personality.

More recently, based on research findings similar to those which have supported the theory of a process and reactive kind of schizophrenia, an argument has been made for distinguishing among the schizophrenias according to the social competence of the premorbid personality of patients.

Both these theories assume that schizophrenias may be distinguished according to underlying personality stability. The theory of the social competence of the premorbid personality implies a continuity in underlying personalities from social competence to social incompetence, compared to the implicit notion of disparate diseases made in the process-reactive dichotomy. Also its exponents have spelled out more explicitly why and how the factors found relevant to recovery are indicative of social competence.

In this article some of the assumptions of

the process-reactive dichotomy and of premorbid social competence are questioned within the perspective of research findings about functional psychotics.

### The Patients Studied

The major research findings reported in this article are from a study of all functional psychotics, age 20-49, admitted to a large mental hospital. No patient had ever been in any mental hospital previously for more than one month.

All functional psychotics, rather than only the schizophrenics, were studied to avoid the problem of reliability of diagnostic distinctions between the schizophrenias and the manic-depressive psychoses. However, when the number of cases warranted taking the schizophrenics separately, the findings reported were found to hold for the schizophrenics alone.

Much of the findings forming the basis of the arguments of this paper have been published already. Only summaries of relevant findings will be presented from the published material.

The data for the study came from the medical charts of patients at Saint Elizabeths Hospital, Washington, D.C. Information was abstracted from:

1. Psychiatric interviews with the patients and with informants who knew the patients.
2. Social service interviews, usually with the same persons.
3. Medical orders.
4. Nursing notes.

Patients meeting the following criteria were selected for study:

1. Diagnoses—functional psychoses only.
2. Age-20 through 49.
3. Residence—District of Columbia for one year or more.
4. Date of admission — January 1, 1953, through August 21, 1956, and no earlier stay of more

than one month in a mental institution.

Because prognosis was to be measured by the probability of release back to the community within the first year of hospitalization, patients meeting the above criteria were excluded from study if, within the first year of hospitalization, they were discharged without medical approval, transferred to another mental hospital, held in prisoner status and still charged, or died.

The study was mainly limited to patients in their first admission to a mental hospital because it seemed probable that factors potentially relevant to prognosis (e.g., characteristics of patients, duration of symptomatic behavior before hospitalization occurred) might differ upon succeeding admissions.

The exceptions, those with a previous mental hospitalization of *less* than a month, were included because this was a means of increasing the number of cases who were white, married and of a higher socio-economic status; separate statistical analyses of patients according to such characteristics were done.

Research resources did not permit a comparative study of patients who were in second and succeeding admissions.

Of the just over 5,000 admissions to the hospital for the period of study, 593 met the criteria of selection. Nearly all of these were diagnosed as schizophrenic—just under 90 percent. The median age of the group was in the early 30s. Thirteen percent were white men; 29 percent, white women; 20 percent, Negro men; and 39 percent, Negro women.

*Prognosis: the probability of release.* Prognosis was measured in this research by the probability of release within the first year of hospitalization. "Release" was the first time a patient returned to the community for a trial period of living away from the hospital. Some patients, in

relatively rare instances, were discharged directly without having had a trial visit and in these cases release coincided with discharge. The trial or extended visit was given when the patient was sufficiently free of evident symptoms of psychosis for the hospital to consider him a good risk for living in the community.

*Probability of return.* If a patient was released during the first year, his record was checked for determining whether or not he had returned to the hospital within one year after release and the correspondence file was also checked for his hospitalization elsewhere within the year.

### Factors Associated with Prognosis

The process-reactive distinction was developed out of clinical and statistical studies of prognosis. The factors found relevant to prognosis have fallen roughly into four major groupings:

1. Type of symptoms (e.g., lack of affect and clear sensorium characterize the process schizophrenia).
2. The circumstance of onset and how long symptoms have been manifested.
3. Characteristics of patients (e.g., education, age).
4. Kinds of social relations and experiences preceding the onset of symptoms (e.g., marital status, employment record).

The theory relating the social competence of the premorbid personality to prognosis is mainly based on findings about groupings 3 and 4 above.

*Type of symptoms.* Certain kinds of symptoms were coded, but the data were not valid for testing assumptions about which symptoms are relevant to the process-reactive dichotomy.

*The circumstance of onset.* Whether onset of symptoms was sudden or gradual has been repeatedly reported as relevant to prognosis. Sudden onset, especially in reaction to some external stress, is one of the

qualities defining the reactive schizophrenia.

In the research at Saint Elizabeths Hospital, it was originally planned to code whether onset was sudden or gradual but judgment of this proved elusive. Often the patient described a sudden onset but those who had lived with him described a slow onset.

Patients' descriptions of the sequence of symptoms seemed frequently distorted by their efforts to cope with the symptoms themselves. The opportunity for others to observe the onset varied according to their relation with the patient and especially to whether they had lived with him.

The psychiatric staff seemed to judge as having slow onset those cases in which the patient had had a long period of symptoms before hospitalization occurred, rather than judging independently the kind of onset from information about initial behavior.

Finally, in a review of studies about onset, it was reported<sup>3</sup> that "little significance can be attached to the welter of situations to which precipitation of the clinical picture has been ascribed. One might say that there is no conclusive proof of their significance and that diagnostically they are meaningless."

Because of these various considerations, it was decided that coding the onset as sudden or gradual was not warranted. Instead, the kind of initial symptom described by persons about the patient before his hospitalization was used as an index of the kind of onset.

The symptoms—depression, physical complaints, nervousness, irritability or change from routines (patient becomes slovenly, careless in work, etc.), which overlap with non-psychotic behavior—seemed indicative of a slow onset. Bizarre behavior or sudden outbursts of aggressive behavior as the initial symptoms were considered to indicate a sudden onset. Of course, the extent of

exposure to the patient-to-be of those describing the symptoms was still a confounding factor.

For those kinds of initial symptoms for which there were sufficient cases to warrant statistical consideration, there was none which picked out patients differing in prognosis beyond what might be expected by chance.\* At least, these kinds of data do not confirm statistically that the kind of onset is relevant (see Table 1).

**TABLE 1**  
**PERCENT RELEASED BY FIRST KIND OF SYMPTOM MANIFESTED**

<i>First kind of symptom manifested</i>	<i>Released within first year of hospitalization</i>	<i>Number of patients manifesting the kind of symptom</i>
Strange, bizarre	54%	140
Nervous, irritable	60%	104
Withdrawal, depressed	60%	63
Changes from routines	52%	46
Physical complaints	56%	34
Excessive drinking	43%	28
Increase in religious behavior or thoughts	68%	19

*How long symptoms had been manifested.* A large number of studies report that the longer patients manifested symptoms in the community before hospitalization occurred, the more negative was their prognosis. In our study, however, the negative prognosis according to duration of symptoms was a matter only of the one episode which had resulted in hospitalization.<sup>4</sup> Prehospital duration was not associated with the probability that released patients were rehospitalized within a year of their release.

Moreover, some patients were reported by their families to have manifested psychotic symptoms years earlier, with a re-

\* All differences discussed are statistically significant. The standard for significance was that the difference could have arisen by chance in 5% or less of samples drawn from the universe. The chi square test was used.

mission of symptoms lasting for one year or more and there had not been any hospitalization at the earlier time. Those so reported did not differ from other patients in prognosis during the current episode which was under study. How long ago the previous manifestation had occurred also was not relevant to prognosis.

Duration of symptoms therefore, for the patients studied, was not relevant to prognosis except within the given episode of psychosis being studied. It was concluded that the symptoms seem to have a tendency toward self-perpetuation according to duration, which is independent from episode to episode. If so, use of duration of symptoms as one of the factors for dividing schizophrenics into the process and reactive subcategories would not be relevant except for the particular episode of psychosis being considered.

### **Characteristics of Patients and Their Social Relations and Experiences**

As noted, the theory of the social competence of the premorbid personality has been applied to similar findings about prognosis as those which are, in part, the basis of the process-reactive dichotomy. The major findings have been about education, marital status and the job stability of patients.

However, during the 30 years since the first major statement about the process-reactive dichotomy by Langfeldt,<sup>5</sup> a large number of studies have led to an accumulation of factors found to be associated with prognosis in the functional psychoses, which may therefore be considered bases for making the process-reactive distinction or measuring the social competence of the premorbid personality.<sup>6</sup>

For some of the factors cited in the extensive literature, the evidence has tended to be consistent. It is firmly established, for instance, that the higher educated patients are more likely than lower educated

patients to be released from mental hospitals.<sup>6</sup> For other factors (for example, age) the evidence for association with prognosis has not been consistent from study to study.

The findings of our research also showed a number of characteristics of patients to be associated with their prognosis.<sup>6</sup> Moreover, these associations held for patients hospitalized during the extensive use of tranquillizing drugs as well as for patients hospitalized before the use of such drugs.<sup>7</sup>

During the period of extensive use of drugs the hospital changed profoundly: it was quieter; there was less conflict between patients, or patients and staff; staff was more optimistic about chances for patients' recovery. That the same characteristics were associated with prognosis, despite the changes in the hospital milieu, could be interpreted as a confirmation that such characteristics measure differences in underlying personality, which are associated with prognosis, independently of patients' experiences in the hospital.

Some of the characteristics lend themselves readily to an interpretation of differences in competence of premorbid personality. Particularly, it has been argued that the series of social behaviors required in getting married, especially for men, who are expected to take much of the initiative, indicate greater stability of personality than would be the case for the single. Similarly, the achievement of high education or a stable employment record would seemingly reflect a stable premorbid personality.

At least for the patients at Saint Elizabeths Hospital, not all of the findings, however, are in agreement with such reasoning about the premorbid personality, nor lend themselves to similar reasoning about the process-reactive dichotomy.

If getting married indicates greater psychological strength than remaining single, it would be expected that the divorced and separated would have more psychological strength and social competence and there-

TABLE 2  
PERCENT RELEASED, BY MARITAL STATUS, RACE AND SEX

	White Men		White Women		Negro Men		Negro Women	
	Married	Single	Married	Single	Married	Single	Married	Single
Released within first year of hospitalization	76%	33%	82%	50%	42%	45%	62%	35%
Number of admissions	25	48	62	60	24	58	90	46
		*		50%		36%		41%
				36		33		66

\* Denominator of 6 cases did not warrant computing the percent.

for a better prognosis than the single. The findings of the study do not support this expectation (see Table 2). Rather, the single did not differ beyond chance from the separated or divorced in prognosis, nor were the differences consistently in the same direction.

Other studies are contradictory about the association of marital status and prognosis. In three of them, the single had the same or better prognosis,<sup>10 11 12</sup> and in three others the single were poorer in prognosis than the separated or divorced.<sup>13\*1415</sup> The evidence has not firmly established that getting married reflects greater social competence and psychological strength than remaining single.

Reasoning similarly, it would be expected that the longer a person remained married the greater his personality stability. But among the married patients we studied, length of marriage was not associated with prognosis.

It would also seem reasonable to expect that if the characteristics of patients and their social experiences before the onset of symptoms indicate something about the underlying personality, such factors would be associated with the chance of a recurrence of psychosis. Unfortunately, there seem to be no studies which followed a group of patients through succeeding episodes of psychosis, or which compared patients in their first mental hospitalization with those in a second or succeeding hospitalization.

For the patients studied at Saint Elizabeths Hospital, at the time of study there were no data about prognosis in succeeding admissions. For the patients who were released, data were collected about their return to Saint Elizabeths or to another mental hospital (if so indicated by the correspondence files).

Out of the large number of characteristics of patients included in the research, only three were associated with the probability

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of rehospitalization. (The three associations were beyond chance for the patients admitted originally in 1953-1954; for the patients admitted originally in 1955-1956, the differences were in the same direction, but could have been due to chance.)

The three characteristics were sex, drinking habits and whether another member of the family had ever been in a mental hospital. That is, if released, women were more likely than men to be rehospitalized; teetotalers were more likely rehospitalized than those who drank moderately or excessively; those for whom it was reported another family member had been in a mental hospital were more likely rehospitalized than those with no such family member.

If these characteristics measure underlying personality differences, then the sex of the patient reflects the opposite for released patients from what it did for patients when first hospitalized. That is, women were more likely than men to be released during the first year of mental hospitalization (better prognosis), but released women patients were more likely than released men patients to be returned to a mental hospital (poorer prognosis).

Drinking habits and a family history of mental illness were not associated with release during the first year of hospitalization but were associated with rehospitalization.

More weighty evidence that the findings

are inconsistent with an interpretation of underlying personality differences is the fact that all but one of the factors associated with release during the first year of hospitalization were not associated with re-hospitalization; and the one exception, sex of patient, as noted, was inconsistently associated.

Of course, these data about rehospitalization are limited, but they are all the evidence which is available. They did not support the assumption that the factors associated with prognosis during first hospitalization are associated with prognosis among released patients. If the factors do measure underlying personality, then the underlying personality differences relevant to prognosis in the first hospitalization were not relevant to prognosis during the first year after release.

### **Social Control and Prognosis**

Prognosis is measured by the presence or absence of symptoms of psychosis. But symptoms vary in their social effects and as problems of management in the large mental hospital.

At the time of this study, aggressiveness, anxiety, threatening postures—all called hyperactivity—were special problems for hospital management. Not only did patients so behaving often get defined as "very sick," but they were also more likely placed on a locked ward. Movement toward recovery and release was from wards of most hyperactive patients through those of lesser hyperactive patients, and finally to wards of recovery and quiet patients. Thus, there was inevitably a longer period to release when patients were hyperactive, especially if they remained so for a time.

For instance, none of the patients in our study who were hyperactive during the last quarter of the first year of hospitalization were released during that period. The hospital, concerned about how such patients might behave when they returned to the community, tended to wait a month or so

before assuming that hyperactive behavior, particularly aggressive or threatening behavior, would not recur.

Yet, the findings indicate that hyperactivity may be a positive prognostic factor.<sup>16</sup> Once the patient was in the hospital it became inevitably a negative indicator because of the above considerations. But the empirical evidence was that patients who had been hyperactive before admission to the mental hospital, i.e., while still in the community or during their stay at the psychiatric department of the city hospital, were more likely released from the mental hospital than patients not hyperactive during these earlier periods. In other words, when hyperactivity was considered separately from the problems of hospital management, it proved to be a positive prognostic indicator.

The theories of underlying personality have mainly been based on findings about the prognosis of mental hospital patients. Yet, the theories ignore that the hospital demands conforming behavior before it decides that patients are recovered and also ignore that the hospital tends to define severity of illness according to problems of management. Consequently, when findings are about patients in a mental hospital, it would seem reasonable to consider what makes for patients' success or failure to be rid of their symptoms, *within* the social environment and institutional demands of the hospital.

### **Theories of Underlying Personality: Blinders?**

Whatever the empirical evidence, the confounding of diagnosis with knowledge about prognosis would seem to be putting on blinders which hinder further knowledge about the functional psychoses and schizophrenia, in particular. Such confounding of diagnosis with prognosis would remove from separate study the characteristics

of patients, their social experiences, and the reactions of others (including the mental hospital staff) to their behaviors and assign these to the diagnosis.

The argument for distinguishing kinds of illness according to such characteristics and conditions would seem as reasonable as arguing that patients with cancer hospitalized too late for surgery and doomed to die have a different illness (defined, in turn, according to their characteristics and conditions of illness) than patients treated early in their illness and more successfully. It would seem as reasonable to include in the diagnosis of infectious diseases the state of the host, basing it on nutritional habits, socio-economic status and social habits.

All notions of recovery from schizophrenia or the functional psychoses in general are based on recovery from symptoms. Recovery from symptoms is a matter of recovery *within an institutional setting*. There does not seem to be any research about factors associated with prognosis among functional psychotics *not* hospitalized. Before assuming that factors associated with prognosis indicate underlying personality or the process-reactive dichotomy, it would be necessary to show that the factors are associated with the prognosis of psychotics not hospitalized.

Finally, any great emphasis on psychosis as something within the patient untouched by persons or institutions with which he must cope tends to disregard new approaches and theories based on the use of the social milieu to influence the course of the illness.<sup>17 18 19 20</sup> It assigns entirely to the patient's personality the failure and the success of what influences his prognosis.

In another article, the writer has argued that prognosis results from patients' pitting their

symptoms against the demands of the large mental hospital or results from whatever appeal the community has for patients.<sup>21</sup> The argument is that, to be released, patients have to learn what it is that keeps them in the hospital and must have the skills for recognizing and making their way according to the rules of the hospital.

The factors which made for better prognosis—better education, being white, stable employment record, attending church, etc.—seemed measurements of abilities to learn and abide by the hospital's procedures and rules or indicate the greater promise of the community for the patient. To some extent, this argument is also an argument about social competence, but rather than placing it as a fixed part of the personality, it sees social competence mainly as a means of getting out of the hospital.

With the kinds of empirical evidence available to date about associations of factors with prognosis, the emphasis so placed on the hospital, and the community as a potential attraction, cannot be considered more valid than conceptions of process-reactive schizophrenias or the social competence of the premorbid personality.<sup>22</sup> These are, however, alternative interpretations from the same kinds of evidence which form the basis of the theories of underlying personality differences.

This research was initiated while the writer was on the staff of the Laboratory of Socio-Environmental Studies, National Institute of Mental Health. The work was finished with support given subsequently by the National Institute of Mental Health, Research Grant MY 4122.

The views expressed are those of the writer and not necessarily those of Saint Elizabeths Hospital, where this research was done.

The writer is indebted to Helen Swick Perry for her critical review of earlier versions of this paper.

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