Evaluating the Process-Reactive Dimension

by William G. Herron

Abstract

Harrow et al. (1986) report the limitations of the process-reactive dimension as a long-term outcome predictor for young, early phase DSM-III schizophrenics. Two additional studies are now described contrasting the good success of the process-reactive approach as a short-term predictor with DSM-II schizophrenia to its poor success in the same mode with DSM-III schizophrenics. The point is made that the change in diagnostic methods has reduced the heterogeneity of the current population of schizophrenics. The process-reactive conception is suggested as more valuable for a schizophrenia spectrum than for schizophrenia as now defined. Also, a reexamination of current schizophrenic heterogeneity is called for to determine the utility of a process-reactive dimension.

The following comments are in response to a study by Harrow et al. (1986). Results of two studies (Schultz and Herron 1979; Cheselka et al. 1984) preceding but not mentioned by Harrow et al. forecasted a number of their current findings. In particular, we established the predictive ability of the Phillips scale and marital status for symptom improvement in schizophrenic patients diagnosed by DSM-II (American Psychiatric Association 1968). In a comparison of 12 process-reactive measures, the prediction of outcome using stepwise discriminant functions for 3- and 6-month cohorts showed an 84 percent correct classification rate for the original derivation sample and an 89 percent rate for the validation sample at 3 months. At 6 months, the original sample was 82 percent; the validation sample, 62 percent. The Phillips scale was the best predictor at 3 months, with marital status the most accurate at 6 months. These rates are higher than the correlations reported by Harrow et al., but our sample was 138 State hospital patients, with 113 at the 3-month evaluation and 114 at the 6-month evaluation. These evaluations were short-term, with accuracy beginning to decrease in the 6-month evaluation. The outcome criterion was symptomatic improvement only, and a somewhat different version of the Phillips scale (Harris 1975) was used than in the study of Harrow et al.

Nonetheless, our study and theirs support the value of understanding premorbid adjustment for DSM-II schizophrenics. At the same time, both studies highlight sources of variance in the samples other than Phillips scale scores that probably affect the prediction of outcome and could be considered endemic to the process-reactive concept. The process-reactive dimension originated with the idea of two types of etiology for schizophrenics. In one case it was seen as an insidious nuclear process, probably with organic and hereditary involvement. The other possibility was a reactive syndrome with a more acute, environmental, stress-related origin (Kantor and Herron 1966). However, even these distinctions were not so clear. For example, the possibility of hereditary vulnerability has often been hypothesized for all schizophrenics. This reasoning led to an emphasis on the development of schizophrenics, the process group having essentially a more behaviorally and psychically limited developmental progression and prognosis than reactives (Kantor et al. 1953).

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Although other aspects of schizophrenic heterogeneity were noted and conceptualized within a process-reactive dimension (Herron 1979), a pragmatic tendency persisted to equate process-reactive with premorbid adjustment.

In 1984, Cheselka et al. found very different results in a comparison of eight process-reactive measures in DSM-III schizophrenics (American Psychiatric Association 1980). Neither the Phillips scale nor marital status was a successful predictor of outcome at either 3- or 6-month intervals. None of the measures were consistent predictors of symptom change. The Maine scales (Magaro et al. 1980), the Social Attainment Scale (Rodnick and Goldstein 1974), and the Prognostic Scale (Strauss and Carpenter 1974) were successful, but for different measures of symptom removal, time intervals, or sexes. Although again based on a different type of sample and using different criteria and measures than Harrow et al., the results appear predictive of their lack of success with the Phillips scale for DSM-III schizophrenics as well as some success with another measure.

What was most striking to us in the study of Cheselka et al. (1984) was that we appear to have encountered a very different group of patients now diagnosed as schizophrenic. They were primarily a chronic process group who showed very little symptomatic improvement over the 3- and 6-month intervals. The initial sample had 143 patients, but for the 3-month evaluation only 75 could be located, with 62 being found at the end of 6 months. The classification range for the initial sample was 59 percent (marital status) to 97 percent (Phillips scale) process. The change in diagnostic criteria appeared to have limited the heterogeneity of the sample and, in turn, the applicability of the process-reactive premorbid conception.

Harrow et al. did not have such radical results, but their samples differ from ours in being young, early phase schizophrenics that still contained a sufficient number of reactives. However, their total sample of DSM-III schizophrenics was small, and when the multiadmission subsamples were considered, the number of process patients was greater than the number of reactives. In a number of studies currently in progress we have not been able to find samples such as those described by Harrow et al. because they are atypical for the current schizophrenic population. For example, in a study by Welt (1986) comparing 16 methods for diagnosing schizophrenia, only 52 of 248 patients interviewed as admitted were first admissions, and only 37 of 248 were currently married, while 154 had never been married. Our impression is that the typical DSM-III schizophrenic is a process type, at least in premorbid adjustment, and probably also has a limited range of improvement. In fact, Stephens et al. (1982) found that the more systems classifying a patient as schizophrenic, thereby increasing diagnostic certainty, the less favorable the patient’s prognosis.

No number of new considerations can be derived from our work, as well as from that of Harrow et al. (1986) and Westermeyer and Harrow (1984). The first is that the concept of a prognostic continuum as a part of a process-reactive dimension in schizophrenia is now more applicable to a schizophrenia spectrum ranging from schizoid personalities to disorganized schizophrenics. The second is the need for a redetermination of the extent of heterogeneity among schizophrenics as they are now defined, which would usually be by DSM-III criteria. In turn, the utility of a process-reactive dimension will rest on the ability to explain the heterogeneity that is found. That ability will probably require multidimensional predictors for global differences and focused predictors for specific distinctions.

References


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