CHAPTER 12

The Familial and Psychosocial Measurement of Depression

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INTRODUCTION

Many psychosocial and familial factors are commonly associated with the onset, manifestation, course, and outcome of depressive illness. Negative childhood experiences such as parental loss, discord, and inadequacy have long been thought to predispose an individual to depression (Beck, 1967; Beck, Sethi, & Tuthill, 1963; Birtchnell, 1970; Orvaschel, Weissman, & Kidd, 1980). Psychological features or traits that are believed to be largely socially determined, such as low self-esteem, low perceived competence (Beck, 1967; Brown & Harris, 1978), inadequate coping skills (Lazarus, 1966), and learned helplessness (Seligman, 1975), have been suggested as factors that explain why certain individuals become depressed or are prone to recurrent depressions.

The absence of adequate social supports, including an intimate or confiding relationship, and inadequate physical or financial resources have been implicated in the onset, prolonged course, and poorer treatment outcome of depressive illness (Brown & Harris, 1978; Flaherty, Gaviria, & Pathak, 1983; Henderson, Byrne, & Duncan-Jones, 1981; Lin, Dean, & Ensel, 1981). The number and severity of stressful life events and long-standing social difficulties have been found to act as precipitators or provoking agents in the development of depression (Brown & Harris, 1978; Paykel *et al.*, 1969).

Individuals who are treated for depression have been found to evidence poorer social adjustment than their nondepressed neighbors, and to continue to function less adequately in certain areas long after their depressive symptoms have disappeared (Weissman & Paykel, 1974). Finally, recent studies suggest that birth cohort and family history of affective disorder are powerful factors associated with the development and severity of depressive illness (Weissman *et al.*, 1984).

How the measurement of these psychosocial and familial factors is approached depends on the complexity of the factor and the hypothesized relationship between the factor and the illness. Some factors, such as loss of one's parents or inadequate financial resources, are relatively easy to measure, but most require careful definition and operalization before any estimation of their importance in depression can be made. In depression, it is seldom clear whether a social factor causes or is a consequence of the disorder. Determination of the etiological role of a factor in the illness requires the development and testing of causal models. Indeed, the new generation of studies concerned with the etiology of depression and the lifelong characteristics of depressives have provided the field with some impressive new tools for the measurement of psychosocial and familial factors (e.g., Henderson *et al.*, 1981), as well as with models that attempt to account for the complex interactions among such factors (e.g., Brown & Harris, 1978) and for the relationship between social factors and genetic vulnerability (e.g., Kidd & Matthysse, 1978).

However, much of the interest and activity in the measurement of the psychosocial and familial aspects of depression has been stimulated by the need to develop methods appropriate for assessing the outcome of treatment (Gurland, Yorkston, Stone, Frank, & Fleiss, 1972; Weissman & Paykel, 1974). Those involved in treating depressed patients are particularly aware of the importance of social factors in the onset, course, and outcome of the illness. Typically, depressed patients report difficulties in their marital and other interpersonal relationships and impairment in their work performance; often they are dissatisfied with one or more aspects of their lives. Whether these problems are the result of the illness or predispose the individuals to the illness, they become a major focus of most therapies used to treat depressives. The rationale for this focus is that positive changes in the psychosocial world of a patient will promote a reduction in symptoms and perhaps protect the individual from further illness (Klerman, Weissman, Rounsaville, & Chevron, 1984). A wide variety of scales have been used or devised to detect and characterize these changes (Katschnig, 1983; Weissman, 1975; Weissman, Sholomskas, & John, 1981).

The measurement techniques to be reviewed in this chapter come from two kinds of depression research. One kind primarily focuses on the psychosocial and familial factors believed to play an etiological or causal role in depressive illness, and requires careful separation of factors that predate the illness from factors that may be concomitants of the illness. Such studies measure and estimate the importance of social risk factors in depression. Studies of the other kind are concerned with the psychosocial and familial concomitants or consequences of depression, regardless of their potential etiological role in the illness, and require that the social functioning and relationships of depressives be assessed over time. Such studies measure and/or monitor changes in social adjustment.

While there is often overlap in the concepts that underlie measures of social risk factors and measures of social adjustment, the different purposes of the

studies for which they were developed provide a convenient way to organize a review of the instruments. Therefore, we first present an overview and review of assessment techniques used to measures psychosocial and familial risk factors (specifically, those that have demanded conceptualization, operationalizing, and testing), and then we review a variety of scales that are suitable for the assessment of social adjustment in depressed persons.

THE MEASUREMENT OF PSYCHOSOCIAL RISK FACTORS IN DEPRESSION

Differences in how risk factors are measured often appear to explain differences in findings across studies. Even seemingly straightforward measurement tasks can be approached in a variety of ways — for example, how "social class" is determined; whether "loss of parent" includes loss by death and by separation; or what is regarded as an "intimate relationship." When an investigator is considering the measurement of such factors in depression, careful attention to what has already been found and an appreciation for the potential power of distinctions seem prudent. When more complex factors are being considered, the measurement issues become even more complicated. Parental inadequacy, stressful life events, and an absence of adequate social supports are factors believed to increase the risk of depressive illness, but how they are measured depends on how they are conceptualized.

Measurement of Parental Characteristics

The Child Report of Parent Behavior Inventory

Beck (1967), among others, has suggested that the negative attitudes of the depression-prone individual are acquired during early life and influenced by interactions between parent and child. However, of five early studies linking depression in adulthood to negative parental behavior in childhood (Abrahams & Whitlock, 1969; Jacobson, Fasman, & DiMascio, 1975; Munro, 1966; Perris, 1966; Raskin, Boothe, Reatig, Schulterbrandt, & Odle, 1971), only the Raskin *et al.* study used a measure of demonstrated validity and reliability to assess the parental characteristics that were examined.

In consultation with the author of the 192-item Child Report of Parent Behavior Inventory (CRPBI; Schaefer, 1963, 1965), Raskin and his colleagues (1971) shortened the CRPBI to 90 items before administering it to the depressives and normals in their sample. They found that two dimensions of the self-administered instrument differentiated the parents of the depressed patients from those of normals: (1) "rejection," and (2) "psychological control." A subsequent, more carefully designed study comparing the 90-item CRPBI among depressives and normals was conducted by Crook, Raskin, and

Eliot (1981). In this study, (1) only patients with clincial depression were included; (2) to reduce possible bias, patients did not complete the CRPBI until 5 weeks after discharge, when their depressive symptoms had remitted; and (3) judgments of parental behavior during childhood were made by social workers based on sources other than subjects' reports, to provide an independent (if not blind) assessment of the major parental dimensions believed likely to emerge: The parents, particularly the mothers, of depressives were reported to have been much more rejecting and controlling through derision, debasement, withdrawal of affection, and manipulation through guilt and anxiety than the parents of normal controls. The judgments of the social workers, for the most part, confirmed these findings.

The Parental Bonding Instrument

Parker, Tupling, and Brown (1979) sought to operationalize Bowlby's (1969) concepts of parental bonding. Beginning with a list of 114 parental behaviors and attitudes thought to characterize the principal dimensions of parental bonding, the authors conducted a series of studies and factor analyses from which they derived the 25 items that comprise the two scales of the self-administered Parental Bonding Instrument (PBI): Care (i.e., "care" vs. "indifference/rejection") and Overprotection (i.e., "overprotection" vs. "allowance of autonomy/independence"). Together, the two scales permit five types of parental bonding to be examined: (1) high Care-low Overprotection (conceptualized as optimal bonding); (2) low Care-low Overprotection (conceptualized as absent or weak bonding); (3) high Care-high Overprotection (conceptualized as affectionate constraint); (4) low Care-high Overprotection (conceptualized as affectionless control); and (5) average (defined statistically by norms). In an impressive program of research, Parker has found the following:

1. Lower parental Care and higher parental Overprotection scores on the PBI differentiated subjects with either trait or clinical depession from those who were not depressed and those who suffered from bipolar depression (Parker, 1979a, 1979b).

2. Depressives' mothers rated themselves on the PBI in much the same way as the depressives did — that is, as low in Care and high in Overprotection. This suggests that depressives' recall of past parental behavior is not biased by their depressed state (Parker, 1981).

3. The same associations between PBI scores and depressive symptoms existed among adoptees who had never lived with their biological parents, providing support for the causal influence of parental characteristics on mood levels in the absence of hereditary influence that might otherwise explain the associations between PBI scores and symptoms (Parker, 1982).

G. Parker and K. Wilhelm (personal communication, December 14, 1983) found that "care" and "control" dimensions accounted for and explained the

variance in a pool of items selected to assess marital and other intimate adult relationships. From their preliminary work they have devised a 24-item self-administered report measure, which, when reliability and validity studies are completed, will provide the field with a new tool to examine marital bonding along the same dimensions as parental bonding. Empirical research comparing the behaviors of depressives' parents with the behaviors of the depressives' spouses could contribute considerably to our understanding of the link between the childhood and adult bonding patterns in depression.

The Measurement of Expressed Emotion

Brown, Birley, and Wing (1972) and Vaughn and Leff (1976a) provided empirical evidence that deleterious aspects of the family environment could be specified and measured with standardized procedures. Their work on expressed emotion (EE) revealed that measures of overinvolvement, hostility, and critical comments by schizophrenic patients' relatives at the time of hospital admission possessed powerful prognostic information about the likelihood of relapse (Goldstein & Doane, 1982).

Until recently, the methods used to assess EE in families have been quite complicated and time-consuming, and thus more appropriate for researchers with small inpatient populations. But Goldstein and Doane (1982) have devised a sort method for assessing EE, which involves obtaining a 5-minute audio-recorded description of the patient from a parent or other close relative. From the speech sample, a straightforward scoring of EE content can be made. EE scores from the 5-minute audiotapes have been found to agree highly with scores from the traditional 1½-hour video-recorded family sessions among schizophrenic adolescents (M. Goldstein, personal communication, October 30, 1983).

Using the lengthy family interview method, Vaughn and Leff (1976b) found that there was a relationship between relatives' high EE scores and relapses among neurotic depressives. In contrast to schizophrenics, the depressives were found to be more sensitive to criticism and were not protected against relapse by drug treatment or by reduced contact with relatives. In addition, factors similar to high EE *scores* have been found by others to differentiate parents of depressives from parents of normal controls (Crook *et al.*, 1981; Parker, 1979a, 1979b), and such relationships between EE and the development and course of depression will probably be found when 5-minute audiotape methods are employed. Furthermore, an alternative to the self-administered report measures of parental behaviors and attitudes is sorely needed, if only to strengthen the findings from family interview and self-administered measures. This new brief technique for obtaining EE scores now makes it possible to assess this important dimension of parental behavior in large outpatient samples.

Measurement of Stressful Life Events

A considerable amount has already been written about approaches to the assessment of stressful life events. Most recently, Dohrenwend and Dohrenwend (1981) edited a comprehensive volume in which they suggested guidelines for the selection and measurement of events when etiological questions concerning events and illness are being investigated. It seems more useful to provide a summary of their recommendations than to attempt a review of the many scales that have been devised to assess life events.

Stressful life events are those that are proximate to rather than remote from the disorder. Only if the investigator can date the onset of the event in relation to the onset of pathology, and learn whether the event was within or outside the control of the subject, can relatively unambiguous inferences about the etiological role of such events be made. There are at least three types of events that should be kept distinct when considering their causal relationship to the illness: (1) events that may be confounded with the subject's condition; (2) events consisting of physical illnesses and injuries to the subject; and (3) events whose occurrences are independent of the subject's physical and psychiatric condition.

Post hoc personal measures of the stressfulness of particular life events should be avoided. On the other hand, if group norms are used to assign weights to events, they should be determined for the group and time studied. Finally, quantitative estimates of the relationships between various aspects of life events and different kinds of health changes should be developed, and the nature of these relationships should be expanded in terms of a life stress process composed of life events and the psychological and social contexts in which they occur (Dohrenwend & Dohrenwend, 1981, pp. 3-23). For example, Brown and Harris (1978) found that "provoking agents — defined as stressful life events and ongoing difficulites — were several times more likely to produce depression when the working-class women in their sample had one or more vulnerability factors (i.e., loss of mother before age 11, the presence of three or more children aged 14 or under at home, lack of paid employment, and lack of an intimate or confiding relationship). Such studies go beyond the simple question "Does the event increase the risk of depression?" and help to delineate the contexts in which events will be most likely to produce illness.

Measurement of Social Support

The concept of social support has become a focal point in research for its potential contribution to the epidemiological explanation of depression, particularly because social supports may serve as mediating or buffering factors between stressors and illness (Lin *et al.*, 1981). Social support is defined as

"support accessible to an individual through social ties to other individuals, groups, and the larger community" (Lin, Simeone, Ensel, & Kuo, 1979, p. 109). Since there is conceptual overlap between scales that measure social support and those that measure the broader construct of social adjustment, a review of measures of social support is included in the next portion of this chapter. However, it should be noted here that in the Brown and Harris (1978) study and in a number of subsequent studies (Campbell, Cope, & Teasdale, 1983; Costello, 1982; Roy, 1978, 1981; Solomon & Bromet, 1982) the absence of an intimate or confiding relationship, simply and directly assessed, was found to be a powerful risk factor in the development of depression.

THE MEASUREMENT OF SOCIAL ADJUSTMENT IN DEPRESSION

The separation of measures of social adjustment in depression from measures of psychosocial and familial risk factors in depression is somewhat arbitrary, since social adjustment might easily be conceptualized and measured as a risk factor. However, there are several reasons why we have divided the review in this way.

First, most research in depression has involved the study of persons once they are already ill. And while studies have found that social adjustment and symptoms may by partially independent (Strauss & Carpenter, 1972; Weissman, Klerman, Paykel, Prusoff, & Hanson, 1974), impairment in social adjustment is expected to be a concomitant feature of depression. Only in prospective studies of persons who may already be at risk for depression (e.g., by virtue of depressive illness in a parent) can social adjustment be assessed as a risk factor — possibly conceptualized as a component of personality. With the exception of the Henderson *et al.* (1981) study of neurosis and social supports, we know of no published study in which social adjustment per se has been considered as a risk factor in depression.

Second, because of the practical need for measures of social adjustment in planning treatment and assessing treatment efficacy, many more scales have been developed to assess social adjustment than other psychosocial and familial factors in depression. Finally, social adjustment has been broadly conceptualized, and as a result, nearly every imaginable psychosocial and familial variable has been assessed by one scale or another. While the newer scales tend to measure more unitary concepts, many of the most commonly used and studied instruments comprehensively assess social adjustment. The large number and variety of scales available for use require that they be reviewed together, compared, and evaluated.

The remainder of the chapter provides an historical overview of this active

area of measurement; alerts the reader to the controversies in, and operational and practical approaches to, the measurement of social adjustment; and reviews 16 scales that are suitable for use with depressed patients.

Historical Overview of Social Adjustment Measurement

Over the past three decades, there has been an unprecedented interest in the community adjustment of psychiatric patients, and this recently has expanded to include medically ill patients. In psychiatry, interest in patients' community adjustment has been a natural outgrowth of the treatment trend from custodial to outpatient care. This trend gained momentum in the United States with the opening of community mental health centers in the 1960s and further accelerated in the 1970s when it became apparent that deinstitutionalized patients with chronic disorders were having problems in the community.

The expansion of interest into the social world of the patient required the addition of new measures of disturbances — ones that were distinct from those assessing symptoms or abnormalities of thought. Several scales were developed for the assessment of social adjustment. The first scales in psychiatry, which appeared in the 1950s and 1960s, were used to evaluate the posthospital adjustment of schizophrenic patients discharged on regimens of the new major tranquilizers or to assess psychotherapy outcome in selected outpatient populations. In the 1970s, systematic assessment of patients' social functioning became a part of the evaluation of their initial state as well as of their treatment outcome.

The first review of available social adjustment scales appeared in 1975 (Weissman, 1975); it described 15 scales that met criteria of reliability, validity, and utility. Criteria for evaluating scales with regard to content, methods for obtaining information, sources of information, and psychometric properties were established. Other factors involved in scale selection were described, such as time period assessed, length of time required to administer, scoring, and training. Scales that were limited in scope, underdeveloped, or developed for one particular study were not included. Most of the 15 scales in the review sufficiently met selection criteria, but three early scales were included because of their historical interest and because later scales were derived from them.

In 1981, a second review appeared (Weissman *et al.*, 1981), in which 12 new social adjustment scales were described. Some of the scales covered had been adapted from pre-existing scales for use with new patient populations; some had been designed with medically ill patients in mind; and some offered new approaches to the problem of how "best" to assess social adjustment. Thus, by 1981 at least 27 social adjustment scales that met criteria of reliability, validity, and utility were available.

Definition and Components of Social Adjustment

"Social adjustment" is neither a unitary nor a global concept. Broadly defined, it is the interplay between the individual and the social environment. In practice, the concept primarily involves the evaluation of an individual's functioning in different roles that are commonly accepted as appropriate. Normally, an adult will function in most of the following roles: occupational; marital, as spouse and parent; within an extended family, with parents, siblings, and other close relatives; and in the community, with friends, acquaintances, and groups. Within each role, functioning may be further divided into instrumental performance and affect, or behavior and attitude in roles. Typically, the individual is evaluated in terms of the way his or her role performance conforms to the norms of his or her referent group.

Theoretically, a discrepancy in the person-environment fit may result from a disability on the side of the individual or from disturbances in the social environment (Katschnig, 1983). Katschnig identified 21 different terms used to describe social adjustment or some aspect of it; of these, seven were positive (e.g., "social attainment," "social competence"), six were neutral (e.g., "social performance," "adaptive functioning"), and eight were negative (e.g., "social maladjustment," "social impairment"). The length of the list and diversity of the terms provide some hint of the multidimensional nature of the concept and of the theoretical biases of the investigators who study social adjustment.

Controversies in the Concepts and Measurement of Social Adjustment

Symptoms and Social Adjustment

The early social adjustment scales were designed to provide broad and extensive coverage of discharged psychiatric inpatients' social functioning in the community. Many of these scales included measures of symptomatic behavior believed likely to impair the patients' interpersonal relations and performance of instrumental tasks. With such assessments, an estimation of the burden a patient represented to his or her family and community could be ascertained. Authors of later scales — designed primarily for use with treated outpatient populations — tended to avoid the inclusion of symptoms per se, seeking to separate the measurement of social functioning from psychopathology. They reasoned that while an overlap between symptoms and social adjustment is often found, they may be quite independent: For example, some persons may function reasonably well although symptomatic, and others may function poorly although asymptomatic (Strauss & Carpenter, 1972; Weissman *et al.*, 1974). Furthermore, treatment may have differential effects on symptoms and social functioning. Symptoms are primarily a reflection of internal

psychological and physical states that may have consequences in social relations. On the other hand, social adjustment is a reflection of the patient's interactions with others and of his or her performance and attitudes in roles, all of which are likely to be modified by previous personality and by familial and cultural expectations.

A resolution of the question of the independence of symptoms and social adjustment requires that they be measured separately and as accurately as possible. Investigators who employ social adjustment scales that assess satisfaction and feelings in social roles, both of which are likely to overlap with the symptoms of depression, should separate those items from the more objective performance items when they calculate role or overall social adjustment. In this way, subgroups of patients in whom the relationship between symptoms and social adjustment may differ can be identified. Such subgroups may be found to require different therapeutic intervention.

Operational Approaches to the Assessment of Social Adjustment

Recent developers of social adjustment scales have been critical of the use of ideal standards and the reliance on normative data in the assessment of social adjustment (Clare & Cairns, 1978; Platt, Weyman, Hirsch, & Hewett, 1980; Remington & Tyrer, 1979). Their scales instead assess the patient by making use of his or her own social context and by concentrating on more objective indicators of the patient's functioning within that context. At this stage, the merits of the less value-laden approaches to the assessment of social adjustment cannot be fully evaluated. Only when a substantial body of data on both patient and nonpatient groups becomes available can full appraisal of their usefulness in this measurement area be determined.

Methods of Obtaining Information and Informants

Methods of Obtaining Information

The methods available for obtaining information on patients' social adjustment have been described in detail by Weissman (1975). In general, written self-administered report inventories are the least expensive to administer. Their disadvantages are as follows: (1) Illiterate informants require that someone read the inventory to them; (2) psychotic and delusional patients may underreport their impairments; (3) very disturbed patients may be unable to complete or understand the intent of the task; and (4) some respondents falsify their responses. In-person interviews have the advantage of providing the most complete information, in that both respondent and interviewer ratings are typically made. Other advantages are that the interviewer may be able to calm a patient who might otherwise be unable to participate, can

detect the tendency to underreport or falsify, and can make efforts to encourage the subject to give accurate information. The main disadvantages are the costs of training and employing skilled interviewers.

Informants

The patient is the most direct and available source of information in outpatient studies. Depressives can be quite reliable informants, although they have been found to rate themselves as more impaired than an interviewer rates them (Weissman & Bothwell, 1976). Significant others — usually a spouse or someone who is in close contact with a patient — can also provide the information. Both patients and significant others are likely to be somewhat biased in their reports. However, studies that have compared the ratings of patients and their significant others have found impressively high rates of agreement and no particular pattern in the discrepancies between them (Glazer, Aaronson, Prusoff, & Williams, 1980; Weissman & Bothwell, 1976).

Selecting a Scale

Table 12-1 describes the properties of 16 scales that we review in this chapter. There are a number of concepts underlying social adjustment, which are measured with varying emphasis in the different scales. Apart from the practical issues involved in choosing a scale, the major consideration should be how well it measures the concepts that are of particular interest in the study for which it is intended. This will require an examination of both the qualitative and quantitative properties of the instrument.

The scales included for review here are those that seem particularly suited for studies of depressed patients. They represent a variety of approaches to the conceptualization and measurement of social adjustment. The scales are grouped in the following manner:

1. *Functioning in roles.* Included are 11 scales that broadly assess adjustment in a variety of social roles and areas.
2. *Functioning in circumscribed roles.* Included are 2 scales, the first of which comprehensively covers the adult roles in which women have traditionally functioned, and the second of which provides extensive coverage of the marital role.
3. *Available social supports.* Included are 3 scales, each of which primarily assesses the practical and emotional support available to the patient.

Within the groups, the scales are arranged as they became available chronologically over the past 20 years.

Functioning in Roles

The Katz Adjustment Scale — Relative's Form. Katz and Lyerly (1963) and Hogarty and Katz (1971) developed the Katz Adjustment Scale —

TABLE 12-1 Detailed Characteristics of Social Adjustment Scales Suitable for Depressed Patients

Scale	Informant	Method	Content	Original use	Target populations	Populations studied	Psychometric properties	Number of items	Period assessed	Completion time
					Functioning in roles					
Katz Adjustment Scale — Relative's Form	Significant other (patient/subject optional)	Written self-administered	Occupational; community/social; marital family; assessment of psychiatric symptoms	Establishment of community norms of social adjustment; identification of candidates for treatment	Inpatients and outpatients after psychiatric treatment; community residents	Community outpatients and normals; schizophrenics and DEPRESSIVES	Reliability; validity; sensitivity; scoring system	205	3 weeks	25-40 minutes
Personality and Social Network Scale	Patient/subject (significant other optional)	Written self-administered	Occupational; community/social; marital family; extended family	Assessment of effects of inpatient and outpatient psychiatric treatment	Psychiatric inpatients and outpatients	Psychiatric inpatients and outpatients	Reliability; validity; sensitivity; scoring system	17	Present	Est. 10 minutes
Community Adaptation Schedule	Patient/subject	Written self-administered	Occupational; community/social; marital; parental; extended family; economic; physical environment; utilization of health facilities	Multitreatment evaluation	Psychiatric inpatients and outpatients	Psychiatric inpatients and outpatients	Reliability; validity; sensitivity; scoring system	217	Present	30-60 minutes
Structured and Scaled Interview to Assess Maladjustment	Patient/subject	Interview	Occupational; community/social; marital; parental; marital family; extended family	Outpatient psychotherapy outcome study	Psychiatric outpatients	Psychiatric outpatients; DEPRESSIVES	Reliability; validity; sensitivity; scoring system	60	Past month	1 hour

(continued)

Table 12-1 (cont'd)

Scale	Informant	Method	Content	Original use	Target populations	Populations studied	Psychometric properties	Number of items	Period assessed	Completion time
Social Adjustment Scale	Patient/ subject	Interview	Occupational; community/social; marital; parental; extended family; economic	Outcome study of pharmacotherapy and psychotherapy in depressed outpatient women	Outpatient depressives	Community residents; substance abusers; suicide attempters; unipolar and bipolar DEPRESSIVES	Reliability; validity; sensitivity; scoring system	48	Past 2 months	45-60 minutes
Social Adjustment Scale — Self-Report	Patient/ subject; significant other	Written self-administered	Occupational; community/social; marital; parental; extended family; economic	Assessment of treatment outcome among depressed outpatients	Depressed outpatients	Psychiatric outpatients; community residents; DEPRESSIVES	Reliability; validity; sensitivity; scoring system	42	Past 2 weeks	15-20 minutes
Self-Assessment Guide	Patient/ subject	Written self-administered	Occupational; community/social; marital; extended family; physical health-illness; assessment of psychiatric symptoms	Assessment of treatment outcome among psychiatric inpatients	Discharged psychiatric inpatients	Discharged psychiatric inpatients; community residents	Reliability; validity; sensitivity; scoring system	55	Past 3 months	20 minutes
Social Maladjustment Schedule	Patient/ subject; significant other	Interview	Occupational; community/social; marital; parental; extended family; economic; physical environment; assessment of psychiatric symptoms	Assesment of social maladjustment	General medical patients; community residents	General medical patients; chronic neurotic outpatients	Reliability; partial validity; scoring system	41	Present	1 hour
Social Problem Questionnaire	Patient/ subject	Written self-administered	Occupational; community/social; marital; parental; extended family; economic; physical environment; legal matters	Assessment of social maladjustment	General medical patients; psychiatric outpatients	Neurotic outpatients	Reliability; partial validity; sensitivity; scoring system	41	Present	5-10 minutes

Social Behavior Assessment Schedule	Significant other	Interview	Occupational; community/social; marital household; physical environment; physical health-illness; utilization of health facilities; assessment of psychiatric symptoms	Measurement of impact of illness on significant others	Discharged psychiatric or medical patients	Discharged psychiatric and medical patients	Reliability; validity; sensitivity; scoring system	239	Past 1 month; past 3 months	45-90 minutes
Social Functioning Schedule	Patient/ subject; significant other	Interview	Occupational; community/social; marital; parental; economic; self-care	Assessment of social role functioning of psychiatric day patients and outpatients	Psychiatric day patients and outpatients	Neurotic and character-disordered outpatients; psychiatric inpatients; DEPRESSIVES	Reliability; validity; sensitivity; scoring system	16	Past month	10-20 minutes
				Functioning in circumscribed roles						
Social Role Adjustment Instrument	Patient/ subject	Interview	Occupational (homemaker); community/social; marital; parental; extended family	Measurement of women's adjustment to adult roles	Normal community residents; psychiatrically ill mothers	Normal community women; psychiatrically ill mothers; DEPRESSIVES	Reliability; validity; sensitivity; scoring system	200	Present	1-2 hours
KDS-I.5 Marital Questionnaire	Patient/ subject; significant other	Written self-administered	Occupational; community/social; marital; parental; extended family (history); physical health-illness; sexual dysfunction	Assessment of pretreatment marital adjustment	Couples entering therapy	Patient and nonpatient couples; DEPRESSIVES	Reliability; validity; sensitivity; scoring system	Approx. 80	Varies	30-60 minutes

(continued)

Table 12-1 (cont'd)

Scale	Informant	Method	Content	Original use	Target populations	Populations studied	Psychometric properties	Number of items	Period assessed	Completion time
					Available social supports					
Personal Resources Inventory	Patient/ subject	Interview	Occupational; community/social; marital; parental; extended family; economic; physical environment (the instrument refers to each of these factors as a support system)	Pretreatment assessment of social support system	Psychiatric inpatients	DEPRESSED inpatients and outpatients	Scoring system	41	Last 6 or 12 months	20 minutes
Interview Schedule for Social Interaction	Patient/ subject	Interview	Occupational; community/social; marital; parental; extended family (the instrument refers to each of these factors as a support system)	Longitudinal epidemiological study	Normal community residents; nonpsychotic neurotic persons	Normal community residents; nonpsychotic neurotic persons	Reliability; partial validity; scoring system	52	Present	1 hour
Social Support Network Inventory	Patient/ subject	Written self-administered	Occupational; community/social; marital; parental; extended family (the instrument refers to each of these factors as a support system)	Assessment of social support received by psychiatric outpatients	Psychiatric outpatients	DEPRESSED outpatients; residents of urban community and religious commune	Reliability; validity; sensitivity; scoring system	55	Present	15-30 minutes

Relative's Form (KAS-R) to assess symptomatic behavior and life situation adjustment of patients in the community. The KAS-R is a self-report inventory; 205 items are rated on a 4-point global scale by a close family member who has recently interacted with the patient. Items are clearly stated and require only a sixth-grade reading level. From 25 to 45 minutes are required for completion. A 3-week time period is assessed.

The scale contains the following five sections: a 127-item rating of symptoms and social behavior; a 16-item rating of performance at socially expected tasks; a 16-item rating of the relative's expectation for the performance of these tasks; a 23-item rating of free-time activities; and a 23-item rating of the relative's satisfaction with the patient's performance of free-time activities. One of the earliest scales, the KAS-R has been widely used over the past 20 years in a variety of settings, and with heterogeneous diagnostic and nonpatient populations. There are considerable data available on reliability, validity, sensitivity, and norms, as well as instructional material with a color movie film for training purposes.

This scale provides an excellent assessment of the former inpatient's symptomatic behavior and instrumental performance within the family, and of his or her recreational participation. Marital, parental, and extended-family relations have less coverage.

The cooperation of relatives has been reported to be good, and the extensive development and use of this scale make it an attractive relative-as-informant inventory. The KAS-R is currently being completed by both patients and significant others in a 5-hospital study of depressed patients in the National Institute of Mental Health (NIMH) Collaborative Program on the Psychobiology of Depression (P. Clayton, personal communication, January 26, 1984). Thus, considerable KAS-R and KAS-S information will be available on depressed patients in the near future.

Personality and Social Network Adjustment Scale. Broad areas of the patient's adjustment and satisfaction with himself or herself in society, work, and in associational and family groups are assessed in Clark's (1967, 1968) Personality and Social Network Adjustment Scale. This is a self-report inventory, in which 17 globally defined items are rated on a 5-point scale by the patient. The form has been used as a mail questionnaire; however, an early study using relative informants was unsuccessful because too few forms were returned. Some test — retest reliability data and evidence for validity have been presented. The scale has been used primarily to evaluate the treatment effects of inpatient and outpatient communities. The time period assessed is "at present." The scale is simple and quick to complete and requires no training. There is a scoring system, but the form is not precoded.

When the scale was employed to evaluate the effects of treatment in a therapeutic community, it was found that adjustment improved from admission to discharge, deteriorated in the first 6 months after discharge, but

returned to the level at discharge in the following 6 months. This level was maintained 18 months after leaving the hospital. Adjustment assessed during a 3-year follow-up showed that patients who were part of the therapeutic community maintained their improvement 5 years after discharge.

The Personality and Social Network Adjustment Scale was used by Frank as an outcome assessment in psychotherapy, and he reported that it correlated highly with the global ratings of the Structured and Scaled Interview to Assess Maladjustment (Gurland *et al.*, 1972; see below). He has found the scale useful in outcome assessment because of its brevity and simplicity (J. Frank, personal communication, February 8, 1977).

This scale is brief and economical. However, information on specific roles is limited, with no specific assessment of marital and parental roles. Individual assessments and response points are global.

Community Adaptation Schedule. The Community Adaptation Schedule (CAS; Burnes & Roen, 1967; Cook & Josephs, 1970; Roen & Burnes, 1968) assesses behavior, affect, and cognition in the work, family (marital and parental), and social (larger commerical and professional) communities. It is a 217-item self-administered report inventory, completed by the patient and rated on a 6-point scale. The time period assessed is "at the present time." Data on reliability, validity, internal consistency, and instructional material are available. The scale takes 30-60 minutes to complete and requires sixth-grade reading ability. Norms for various patient and nonpatient groups are published in a manual, and the scoring system and templates are available.

The most definitive application of the scale has been in multitreatment studies of aftercare, including psychotherapy. The scale has broad coverage of roles and includes both instrumental and affective performance. Items included present a mixture of lifelong characterological behavior and measures of current behavior during the past year, making it potentially less sensitive for evaluative research.

Structured and Scaled Interview to Assess Maladjustment. The Structured and Scaled Interview to Assess Maladjustment (SSIAM; Gurland *et al.*, 1972) assesses subjective distress, deviant behavior, and friction with others in five roles: work (as worker, housewife, or student), social, family, marital, and sex. Objective behavior in a given social context and subjective reactions in that context are included. Rater's global assessments and a general prognostic measurement are made. Sixty items are rated on an 11-point scale, with anchoring definitions for 5 of the 11 point. Information is collected during a structured interview with the patient, which is conducted by a trained professional with clinical experience; the scale takes about 30 minutes to administer. Specific instructions for the structuring of the interview are printed on the interview schedule. The time period assessed varies, but "the past month" is the most usual. Reliability, validity, scoring, results of factor

analysis, and instructional material are available. The current form is not precoded.

This is one of the few structured social adjustment interviews. The interview structuring, anchoring definitions, and guiding explanations reduce ambiguity and provide precision. The items operationalize the assessments of aspects of behavior in a detailed fashion. The coverage is broad, and areas are tapped that are particularly relevant to outpatient populations. The scale was designed as an outcome measure for psychotherapy, and therefore the quantitative or instrumental aspects of behavior have less coverage and may require supplementation. These limitations are minor, and this scale has much to recommend it.

The Social Adjustment Scale. Instrumental and affective performance in work (as worker, housewife, or student), social and leisure activities, relationships with the extended family, marital and parental adjustment, and economic independence are assessed by the Social Adjustment Scale (SAS; Paykel, Weissman, Prusoff, & Tonks, 1971; Weissman *et al.*, 1974; Weissman & Paykel, 1974; Weissman, Paykel, Siegel, & Klerman, 1971). Global evaluations are made by the rater. Each role area includes assessments of performance at tasks, interpersonal relations, friction, and satisfaction in roles. The scale was modified from the previously described SSIAM, with revisions of core items and changes in anchor points for scoring. However, many of the items are directly comparable.

Forty-eight operationally defined items are rated on a 5-point scale. Information is obtained through a semistructured interview with the patient, which takes 45-60 minutes and is conducted by a trained bachelor's-degree-level rater. Initial questions are specified on the interview format. A 2-month period is assessed. Data on reliability, validity, sensitivity, and results of factor analysis are available, as are a video training tape and an instructional manual. The scoring sheet in precoded.

The scale was designed for a maintenance trial of antidepressants and psychotherapy in outpatient women. It has been used to assess nonpsychiatric community populations, suicide attempters, and methadone-maintained patients.

The SAS — Self-Report. A written self-administered version of the SAS, the SAS — Self-Report (SAS-SR; Weissman & Bothwell, 1976; Weissman, Prusoff, & Thompson, 1978) is comparable with the SAS in that it contains 42 questions that measure affective and instrumental performance in occupational role, social and leisure activities, relationship with extended family, marital role, parental role, family unit, and economic independence. The SAS-SR is completed in 15 to 20 minutes, ideally in the presence of a research assistant who instructs the patient about format, answers questions, and checks for completeness of responses. The period assessed is 2 weeks, in order

to facilitate recall and accurate reporting of behavior. The form is precoded and is scored on a 5-point scale, from which role-area means and overall score and/or factorially derived dimensions can be obtained. Higher scores indicate greater impairment.

Agreement between results from the SAS-SR and the SAS interview was examined in 76 depressed outpatients receiving pharmacological treatment and was found to be excellent. Agreement among the patients' self-reports, the significant others' self-report ratings of the patients, and the interviewers' assessments of the patients' condition was good.

The SAS-SR is sensitive to change in depressed patients; improvement in the patients' social adjustment was found to be concomitant with clinical recovery. High internal consistency and test-retest stability across two time periods were found (Edwards, Yarvis, Mueller, Zingale, & Wagman, 1978). The SAS-SR discriminates between patient and nonpatient populations, with patient groups yielding poorer adjustment scores. Norms are available for nonpatient community sample populations, acutely ill and recovered depressed outpatients, schizophrenics, alcoholics, and methadone-maintained opiate addicts.

The Self-Assessment Guide. The Self-Assessment Guide (Willer & Biggin, 1974, 1976) is a written self-administered scale and was developed using factors identified by long-term follow-up studies as those associated with discharged patients' successful community adjustment. Most of the items are based on factor-analytic findings that were found to differentiate patient and nonpatient social functioning. Other items are based on the consensus of a number of professionals in the mental health care field, or relatives of patients regarding what constitutes community adjustment.

The complete questionnaire contains 55 items that cover the following seven areas: physical health, general affect, inter-personal skills, personal relations, use of leisure time, control of aggression, and financial support (employment). The Self-Assessment Guide is to be completed at admission and at some specified time following discharge. It is designed for evaluation of treatment outcome (and thus is intended to be responsive to changes in patients' behavior) and to predict community tenure.

Studies of test-retest reliability and split-half comparison demonstrated that the Self-Assessment Guide is reliable. A comparison of patients and nonpatients using an earlier version of the guide indicated that the scale differentiated between the two groups. The questions included in the final version do not differ substantially form those in the earlier version.

The Self-Assessment Guide was intended to provide information for a goal-directed approach to treatment. The Guide and a computerized scoring system have been designed to identify and print out a list of the patient's social adjustment problems prior to hospitalization. These are used to establish treatment goals relevant to the patient's future community adjustment.

Social Maladjustment Schedule. The Social Maladjustment Schedule (Clare & Cairns, 1978) was developed with the primary goal of operationalizing and standardizing criteria for social maladjustment. The authors' additional goals were that the scale be easy to administer and score, and be generally applicable for use in medical and community settings.

Marital and family relationships, other social relationships and activities, housing, occupation, leisure, and income are assessed. The unique aspect of this scale is that it measures three general categories that are relevant to and cut across all of the domains. They are "material conditions," "social management," and "satisfaction"; independent assessment ratings are determined for each of these categories.

In their attempt to establish objective criteria by which social adjustment and satisfaction could be measured, the authors standardized ways of measuring "material conditions." The importance of these criteria is that to realistically assess a person's social functioning and satisfaction, a yardstick of basic requirements for living must be established. This approach minimizes the impact of subjective report, and the person's subjective report may be compared with the objective criteria.

The category of "social management" and the assessment of functioning therein are extricated less easily from subjective report. However, the authors explicitly define functioning in this category in terms of leisure time and social and familial relationships. The "satisfaction" category takes into account the person's subjective report and measures the degree of satisfaction reported.

The semistructured interview is administered in about 1 hour by a trained interviewer. Forty-one ratings are made on a 4-point scale that indicates absence or degree of maladjustment. The schedule is easy to score and may be analyzed by component analysis. A manual contains a detailed glossary, sample probes, and suggestions for handling problems.

Interrater reliability was demonstrated by several methods. The overall percentage of agreement between raters was measured with respect to how frequently the raters agreed or disagreed on the presence or absence of maladjustment. There were lower percentages of agreement among raters when indicating the presence rather than absence of maladjustment, but general agreement was good. Weighted kappa values were high for eight interrater reliabilities. For 3 of the 17 items analyzed, a significant difference among raters was reported (household care, leisure opportunities, and number of leisure activities).

Partial validity has been established for the Social Maladjustment Schedule. The scale has been used in a number of studies of psychosocial morbidity in the community and in general practice in the United States, the United Kingdom, and Europe.

Social Problem Questionnaire. Corney, Clare and Fry (1982) felt the need for an easy-to-complete, short, and reliable self-administered report for use

in primary care, social work, and psychiatry settings, and none had been developed or validated in Britain. The Social Problem Questionnaire (SPQ), which they developed, is essentially a self-administered report version of the Social Maladjustment Schedule (Clare & Cairns, 1978), described above. Although they attempted to assess the adequacy of the patients' circumstances, the "material conditions" component of the interview could not be covered as fully in the questionnaire. However, the "social management" and "satisfaction" components are directly comparable with the interview, as are the areas covered. Four items were added to determine the presence or absence of legal problems, problems associated with disability in the family, quality of interaction with friends, and other unspecified problems. The SPQ item ratings are the same as those used with the interview: A 4-point scale indicates the absence or severity of the problem.

The SPQ has been found to be simple to administer and readily acceptable to patients in general practice. The 41-items take about 5-10 minutes to complete. When compared with the social workers' assessments in preliminary testing and general practitioners' assessment in the pilot study, only 1 patient's problems out of 22 patients identified were not selected by the questionnaire. Agreement between the interview schedule and the SPQ was generally good; however, there was some degree of discrepancy between ratings.

As the authors assert, the pilot version of the SPQ appears to be a useful screening device to detect social problems among general practice and community patients. However, they intend to do additional work comparing the questionnaire with the Social Maladjustment Schedule, conducting test-retest reliability studies, and devising and testing alternative response scales.

The Social Behavior Assessment Schedule. The Social Behavior Assessment Schedule (SBAS; Platt, Hirsch, & Knights, 1981; Platt *et al.*, 1980) was designed to evaluate both objective changes due to the patient's mental or physical illness and subjective distress experienced by the family as a result of to these changes. The informant is a significant other, and guidelines for choosing the appropriate informant (e.g., face-to-face contact, lives in the same household, assumes responsibility for the patient) have been delineated by the authors. To quantify the impact of the illness, items assessing the patients' disturbed behavior, his or her limited social performance, and the adverse effects of the patient's behavior on the household are included, as well as item measuring the distress to the informant arising from these factors.

The interview is administered by a trained interviewer and consists of 239 items administered in a semistructured format; it takes about 60 to 90 minutes to complete. The interview consists of six sections, five of which cover the past month, and one of which covers the past 3 months. Rated in the sections are the following: (1) background information collected about the patient's illness, his or her behavior, and its effect on the family in view of the patient's recent social history; (2) the patient's behavior, which is rated in terms of

onset, severity, and distress experienced by the informant as a result of the patient's behavior; (3) the patient's social performance, health, and employment history; (4) the objective consequences of the patient's behavior for the informant and the household, as well as the "reported distress" or the emotional consequence of each symptom, and the date of onset of the adverse effects; (5) serious concomitant life events experienced by the informant or by his or her household; and (6) support systems available to the informant, which are assessed in terms of help from friends, relatives, and social services, and housing situation. The interview manual defines the anchor points for ratings.

Several studies have been designed to measure the scale's validity. A total of 127 significant others were interviewed at the time of patients' hospitalizations and after 16 weeks. In one analysis, the relationship between the patients' symptomatic behavior and the extent of the informants' distress was examined. With the severity of the illness held constant, a divergence was found in the relationship between severity of objective symptoms and the extent of informant's distress. The data suggest that informants differ in their distress responses to the same symptoms and lend validity to the concept that subjective and objective aspects of "burden" should be considered separately.

Interrater reliability was established by four raters of diverse professional backgrounds. Agreement between pairs of raters on the total score of the six sections of the SBAS, the objective ratings of behavior, and ratings of reported distress was excellent.

The SBAS is an impressive scale. The interview manual and guidelines provide excellent examples of operationalizing and defining ratings. Further work on the scale's validity and sensitivity are forthcoming. The initial data have shown that the scale discriminates objective from subjective burden and accurately measures the impact of physical or psychiatric illness on a patient's household.

Social Functioning Schedule. The Social Functioning Schedule (SFS; Remington & Tyrer, 1979; Remington, Tyrer, Newson-Smith, & Cicchetti, 1979) is a brief, semistructured interview schedule designed for use with outpatients or day patients, which can be administered to a patient or to an informant. The authors developed the SFS because existing scales assumed either that there is some universally agreed-upon optimal functioning or that normative data are available. With the SFS "norms are decided by the patient or informant, not imposed from outside" (Remington & Tyrer, 1979, p. 152). They chose an interview format because it is most appropriate for use in clinical practice; it has been demonstrated to be more reliable than self-reports; and it offers the interviewer flexibility in determining how the *patient* feels he or she is functioning.

The SFS is structured around 12 sections that incorporate functioning both within and outside the home: (1) employment; (2) household chores; (3)

money; (4) self-care; (5) marital relationships; (6) child care; (7) patient-child relationships; (8) patient-parent relationships; (9) household relationships; (10) extramarital relationships; (11) social contacts; and (12) hobbies and spare-time activities. The 12 areas of functioning were chosen to give a reasonably comprehensive coverage of life situations for a variety of individuals. Some sections, such as the one on social contacts, apply to all individuals; others, such as the ones on employment and marital relationships, apply to large segments of the populations; and still others, such as the one on household relationships, apply only to a few individuals who reside with friends, acquaintances, or relatives other than parents, spouse, or children. The sections on employment, household chores, money, and spare-time activities are divided into "behavior" and "stress" subsections. Under "behavior," the patient's report of his or her own performance is rated; under "stress," the patient's description of his or her feelings, such as strain or worry, is rated. The sections and subsections make 16 potential areas for questions and rating. Within each section and subsection a group of questions is asked, but the semistructured nature of the instrument permits the interviewer to adapt or add to questions in order to elicit an adequate report. The patient's reports are then summarized by rating on an analogue scale, ranging from "no difficulties" at one extreme to "severe breakdown" at the other extreme, with no other defined anchor points. The interviewer makes his or her rating of reported problems by intersecting the scale at the appropriate point with a vertical line. Administration of the full schedule requires 10-20 minutes, depending on the range and severity of the problems. Patients are asked about, and ratings are made of, problems occurring in the past month, but the schedule can be adapted to cover other time periods.

Interrater and interinformant agreement was assessed and found to be satisfactory. The SFS was found to discriminate among personality-disordered and non-personality-disordered patients and a nonpatient group. Analysis of data collected on day patient and outpatient neurotics prior to treatment and after 4 and 8 months of treatment indicated that the SFS is sensitive to change over time.

The SFS provides a quick and quite reliable means to collect data on social functioning in the major role areas. Interviewers should be experienced clinicians, although some training with efforts made to reduce rater bias seems to be required for successful use of the schedule.

Functioning in Circumscribed Roles

Social Role Adjustment Instrument. The Social Role Adjustment Instrument (SRAI; Cohler, Grunebaum, Weiss, Gallant, & Abernethy, 1974; Cohler *et al.*, 1975) was developed because its authors could find no instrument that was suited to measure the conflict women experience in adapting to adult roles. Designed for a study of women's adjustment to motherhood, this scale assesses how successfully a woman has adjusted to her major adult roles. It

provides separate measures of the degree of contact maintained with others in a specific role and her adaptation to that role.

The instrument consists of 25 9-point scales and approximately 200 items, which are administered in a semistructured 1 to 2-hour interview. A high score indicates satisfactory performance. The present form of the SRAI is a modification and revision of an earlier instrument developed by Shader, Kellam, and Durrell (1967).

A woman is asked to rate her performance as a homemaker, friend, wife, mother, and daughter. For each role, separate ratings are made on the frequency of contact with the other or others involved in the particular role relationship, the degree of conflict experienced with regard to that role, the depth of investment or involvement with the other or others, and overall adaptation to that role.

For three of the specified roles, additional scales are scored and are included in determining overall ratings of adjustment. For the role of wife, a separate rating is completed on the degree of sexual satisfaction experienced in marriage. For the maternal role, a separate rating is made on the degree of satisfaction that a woman derives from motherhood. For the role of daughter, a separate rating is made on the extent to which a woman can achieve appropriate and flexible autonomy from her own parents.

For a woman's performance as a housewife, a rating is made on the extent to which she can carry out the associated tasks of cooking, cleaning, managing the household budget, and supervising the children's activities when her husband is not present; a rating also is made on her degree of involvement in a hobby or other form of recreation. As a result of these more specific data, four summary adjustment scales are rated, including global social affiliation, overall investment in interpersonal relationships, overall inner discomfort, and overall psychiatric disturbance.

Shader *et al.* (1967) reported excellent interrater reliability correlations. Test-retest interviews conducted 18 months apart with a nonpatient sample showed stability over time in ratings, suggesting that the interviewer was able to code these interviews in a reliable manner.

The SRAI is appropriate for, and has been shown to discriminate between patient and nonpatient populations. Its focus is limited to the traditional roles of women, but it provides a thorough evaluation of a woman's adjustment to those roles.

KDS-15 Marital Questionnaire. The KDS-15 (Frank, Anderson, & Kupfer, 1976; Kupfer & Detre, 1974) is an 80-item self-administered questionnaire designed to assess marital relationships. Each marital partner is asked to privately complete the scale, which elicits both fixed-choice and essay-type responses. Completion time is unspecified; however, we estimate 30-60 minutes. Forms are to be returned to the researcher clinician without partners' discussing their responses.

The informant is asked to provide sociodemographic information about

himself or herself and each of his or her parents and a developmental and psychosocial history that focuses on the marital relationship of his or her parents. The informant's current marital relationship is assessed through questions about courtship patterns, attitudes of extended family toward marriage, current living situation, makeup of household (including children), expression of affection, expression of disagreements between the couple, and satisfaction and dissatisfaction in all of these areas. Questions about the informant's specific sexual dysfunctions and those of his or her spouse are assessed for the following two time spans: "most of marriage" and "only recently." Items on parenting inquire about attitudes toward children, factors contributing to the decision to have children, attitudes toward child rearing, and effects of children on the couple's relationship. Finally, work, social activities, medical and psychiatric history, and opinions about sex-role division of responsibility in the household are assessed. Attitudes toward divorce, changing women's role, open marriages, and the like are elicited in essay form, and the informant is asked to offer any additional information that may provide insight into the marriage. Individual items are scored.

Reliability was tested using a nonpatient population and was found to be good. The scale discriminated between couples who were entering sexual therapy and those who were not, and between nonpatient and patient groups on items dealing with satisfaction in a sexual relationship. In a study of depressed inpatients and their spouses compared to normal couples, depressed couples reported significantly poorer functioning in all marital areas (Merikangas, Prusoff, Kupfer, & Frank, 1985).

The KDS-15 appears to be quite suitable for use with both patient and nonpatient populations. Whether it is applicable for use with persons who may have difficulty with the essay-type questions requires further testing. It is currently being used in a large-scale clinical trial of drugs and interpersonal psychotherapy in the maintenance treatment of recurrent depression.

Available Social Supports

Personal Resources Inventory. The Personal Resources Inventory (PRI; Clayton & Hirschfeld, 1977) was developed to assess the resources or social supports available to a person during his or her "most well" period of functioning in a defined 1-year period. The PRI is composed of 41 items administered in a structured interview with the patient on admission to a psychiatric treatment facility. A manual with specific probes, anchor points, and a predefined rating system for the items is available. Specific guidelines for defining the 12-month period to be assessed also are provided in the manual and are those delineated in the Research Diagnostic Criteria (RDC). Overall and specific ratings are obtained for the following potential sources of social support: current marriage, dating relationships, family, friends, neighbors, job or work role, financial resources, social contacts, living situation

(safety and physical aspects), and other resources (e.g., religion, organizations, recreation, and pets). The interviewer asks the patient to make specific and global assessments of the social supports available prior to the onset of the current illness. A trained research assistant can administer the scale, since interviewer assessment of the patient is not required, and the interviewer is instructed to score "what the patient says."

Despite the fact that reliability and validity studies are not yet complete, this new scale is very promising because it provides a means for collecting data on another dimension of a person's social environment. It may prove useful for comparing differences in the resources available to various patient and nonpatient populations. A computerized scoring system is being developed, but a precoded data summary sheet is now available. The scale is being used in the NIMH Collaborative Program on the Psychobiology of Depression and in other ongoing studies of depressives (P. Clayton, M.D., personal communications, 1977, 1980, 1984).

Interview Schedule for Social Interaction. The Interview Schedule for Social Interaction (ISSI; Henderson *et al.*, 1981; Henderson, Byrne, Duncan-Jones, Scott, & Adcock, 1980; Henderson, Duncan-Jones, Byrne, & Scott, 1980) was developed by Henderson and Duncan-Jones to assess a person's current social-interactional system and, within that system, to measure the availability, and adequacy, as perceived by the person, of social supports. It was intended to provide a descriptive representation of social relationships and the basis for the development of a "causal model of interrelationships." The authors hypothesized a model that assumes that supportive social relationships act as a buffer is times of stress, and perhaps offset the development of psychiatric illness.

The conceptual structure of the ISSI is based on Weiss's theoretical model in which social relationships are defined by the following six dimensions: (1) attachment; (2) social integration; (3) taking responsibility for another; (4) reassurance of worth; (5) reliable alliance; and (6) obtaining guidance.

The ISSI consists of 52 items in a semistructured interview that takes approximately 1 hour to administer. A precoded interview, an interview guide manual in which each of the 52 items is operationalized, and directions for data analysis are available.

Designed for use in a longitudinal epidemiological study of nonpsychotic or neurotic disorders, the ISSI was administered to a random sample of 756 adults in Canberra, Australia. Data from the first wave of the study were analyzed; they supported the construct validity and reliability of the scale. A detailed description of the data analysis and the development of ISSI items can be obtained.

Correlation matrices were calculated, and 24 variables measuring the availability of social supports and 29 variables measuring the adequacy of social supports were isolated. The authors state that the ISSI items correspond

well to Weiss's structural model. The reliability of the 52 items was tested on a subsample of 282 persons and was found to be acceptable. The ISSI is potentially suitable for use with various adult populations, including normal persons, psychiatrically ill persons, and the elderly, but this has not yet been demonstrated. Its well-developed approach to the assessment of social relationships makes it ideal for studies that focus on that aspect of social functioning.

Social Support Network Inventory. The Social Support Network Inventory (SSNI; Flaherty, Gaviria, Black, Altman, & Mitchell, 1983; Flaherty, Gaviria, & Pathak, 1983) is a written self-administered scale developed to assess the amount of social support received by psychiatric outpatients from their five closest social network members (e.g., relatives, friends, associates). Eleven items are rated for each of the five network members listed. The items cover four important aspects of support: availability, emotional support, practical support, and specific event-related support. Each item is rated from 1 to 5, with higher scores indicating greater support. Additional information is obtained with the SSNI: basic demographics, including whether any children live in the geographic area; a list of *all* network members, which is elicited before respondents are asked to choose their closest five; and data on age, sex, relationship with, and number of years each of the persons has been known to the respondent. Although these data are not incorporated into the scale's scoring, they are of use for detailed network analysis.

Clinicians' global ratings of the strength of 22 unipolar depressed patients' support systems were compared with the patients' SSNI scores, and support for the convergent validity of the instrument was found. To examine concurrent validity, mean SSNI scores were compared for 32 members of a religious commune and a pair-matched group of 32 from an urban neighborhood. As predicted, the respondents from the religious commune reported significantly greater social support, compared with the urban dwellers.

Forty-Four outpatients with unipolar depression were assessed on the SSNI, the Hamilton Rating Scale for Depression (HRSD), and the SAS-SR. The high-social-support group was found to have far lower mean HRSD scores (i.e., to be much less depressed) than the low-social-support group, and to have much lower SAS-SR scores (i.e., to be much better adjusted).

The SSNI is an attractive scale. It is easily administered, takes only 15-30 minutes to complete, has a straightforward scoring system, and elicits off-scale data that are potentially useful for additional social support or network analyses.

COMMENT ON THE MEASUREMENT OF SOCIAL ADJUSTMENT

While we have reviewed only 16 scales — those deemed suitable for use with depressives — there are currently at least 30 published scales that measure

various aspects of social adjustment. Although the scales reviewed here represent a range of approaches to the measurement of social adjustment, there are still at least two major limitations in the available methodology. These limitations are both practical and conceptual. On a practical level, the scales have been tested on, and are applicable to, only adult populations; there is a lack of scales designed specifically for children, adolescents, or the elderly. Moreover, many of the scales cannot be adapted to reflect changes in traditional roles, especially among women.

On the conceptual level, the scales often include overlapping and unspecified concepts. A number of conceptual areas underlie the notion of "social adjustment"; typically, two or three areas are measured with varying emphasis, depending on the scale. For example, a scale designed to measure functioning in roles may also measure availability of supports and capacity for intimacy. Since dysfunctioning in each of these areas may have considerably different implications for intervention, a fruitful task for future development would be the explication and measurement of more unitary concepts. An additional impetus for the clarification of these conceptual areas is that impairment in social functioning has emerged as an integral part of the *Diagnostic and Statistical Manual of Mental Disorders*, third edition (DSM-III), multiaxial diagnostic system. Specificity in diagnostic criteria, which has been a major achievement of DSM-III, suggests that social adjustment should ultimately be approached in a similar manner.

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