CHAPTER 19

Assessment in Psychiatric Rehabilitation

*Kim L. MacDonald-Wilson, Patricia B. Nemec, William A. Anthony, and Mikal R. Cohen**

Psychiatric rehabilitation assessment is the first phase of the psychiatric rehabilitation process. The psychiatric rehabilitation process itself varies greatly in terms of its formality, specificity, and documentation. At its most generic level, the practice of psychiatric rehabilitation involves consumers figuring out the residential, vocational, educational, and/or social goals they want to achieve and developing the skills and supports they need to reach their goals. In some psychiatric rehabilitation programs, this process is helped to unfold in an indirect, less formal, and less documented manner (for example, clubhouses). In other psychiatric rehabilitation programs, this process is directly facilitated and documented by a practitioner (for example, programs using the psychiatric rehabilitation approach developed at Boston University). Even with differences in how the entire psychiatric rehabilitation process is structured in various rehabilitation settings, the psychiatric rehabilitation assessment process at a minimum should include information on consumers' goals and the skills and supports needed to reach those goals.

Psychiatric rehabilitation assessment is not to be confused with traditional psychiatric diagnosis. A rehabilitation assessment and a traditional psychiatric diagnosis are very different. The goal is different; the process is different; the tools are different. Yet, each provides useful and meaningful information, each requires training to implement, and each has a role in a comprehensive treatment and rehabilitation intervention.

The focus of this chapter is on psychiatric rehabilitation assessment. A psychiatric rehabilitation assessment and a psychiatric diagnosis focus on completely different aspects of the person. In contrast to the traditional diagnostic focus on pathological conditions and symptom development over time, the rehabilitation assessment focuses on the skills and the resources the person needs to achieve an overall rehabilitation goal.

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Rather than assigning particular diagnostic categories, the rehabilitation assessment describes the person's skills and resources with respect to the client's attainment of his or her overall goal (i.e., the particular residential, vocational, educational, and/or social environments in which the client wishes to function). The purpose of the traditional psychiatric diagnostic procedure is to assign a diagnostic label to describe the client's pathological symptoms on the basis of the client's history, signs, and symptoms. In contrast, the goal of the rehabilitation assessment is to describe the client's skills and the environmental resources with respect to their impact on the client's overall rehabilitation goals on the basis of the client's and significant others' perspectives and objective evaluation.

Because the goals of the two approaches are so different it would be expected that the diagnostic procedures would be different. Just as psychiatric knowledge and specific diagnostic techniques are needed by a practitioner to conduct a psychiatric diagnosis, a practitioner also needs unique knowledge and techniques to conduct a psychiatric rehabilitation assessment.

THE EMPIRICAL FOUNDATION FOR A PSYCHIATRIC REHABILITATION ASSESSMENT

Recent developments in psychiatric rehabilitation assessment reported in this chapter are anchored in empirical studies conducted during the last several decades by many researchers from a variety of disciplines. In a series of reviews of this research literature, Anthony and others have concluded that the rehabilitation outcome of persons with psychiatric disabilities is a function of their skills and supportive resources in the community.

In the initial review of this body of research, Anthony and Margules (1974) concluded that persons with long-term psychiatric disabilities can learn a variety of skills regardless of their symptoms and that these skills, when properly integrated into a comprehensive rehabilitation program that provides support for the use of these skills in the community, can have a significant impact on client rehabilitation outcome. Since that 1974 literature review, several other reviews and studies have also concluded that rehabilitation outcome is a function of clients' skills and the supportive resources in their communities (Anthony, 1979b; Anthony, 1994; Anthony, Cohen, & Cohen, 1984; Anthony, Cohen, & Vitalo, 1978; Anthony & Jansen, 1984; Anthony & Liberman, 1986; Arns & Linney, 1995; Cohen & Anthony, 1984; Dion & Anthony, 1987).

Given that rehabilitation outcome is a function of clients' skills and resources, it makes sense that the improvement of skills and resources be the focus of psychiatric rehabilitation interventions. *It follows logically that if rehabilitation interventions are designed to improve clients' skills and supports, then rehabilitation assessments should evaluate clients' present and needed skills and supports.*

Traditional psychiatric diagnostic procedures do *not* provide much information relevant to prescribing a rehabilitation intervention. Many of the reviews of the research literature report that only a modest or no significant relationship exists among rehabilitation outcome, clients' psychiatric diagnostic labels, and/or descriptions of the clients' symptom patterns (Anthony, 1979a; Anthony, 1994; Anthony & Jansen, 1984;

Anthony, Rogers, Cohen, & Davies, 1995; Arns & Linney, 1995; Cohen & Anthony, 1984; Ikebuchi, Iwasaki, Sugimoto, Miyauchi, & Liberman, 1999; Rogers, Anthony, Cohen, & Davies, 1997). The lack of a strong relationship between psychiatric diagnoses and rehabilitation outcome flows naturally from the studies that have shown a lack of correlation between a person's symptoms and functional skills.

As the research literature shows (Anthony, Cohen, Farkas, & Gagne, 2000), measures of skills and measures of symptoms show little relationship to one another. For example, Townes and associates (1985) classified psychiatric patients into six groups according to their unique pattern of strengths and deficits and found that the classification was essentially independent of reported psychiatric symptoms and diagnosis. Similar results were reported by Dellario, Goldfield, Farkas, and Cohen (1984). They correlated 16 different symptom measures with 19 different measures of function taken on the same psychiatric inpatients. Only 8 of the 304 correlations were statistically significant; no discernible pattern existed among these 8 correlations. With a correlation matrix of this size, eight statistically significant correlations would be expected by chance. More recently, Goethe, Dornelas, and Fischer (1996) used cluster analysis to categorize 350 patients into four distinct groups on the basis of their functioning. Diagnosis was not related to the categories of functioning. Symptoms were not used to create the clusters.

In summary, the empirical literature suggests two conclusions. First, the present psychiatric diagnostic system collects and organizes diagnostic information that is neither descriptive, prescriptive, nor predictive with respect to rehabilitation. Thus, a unique assessment procedure is needed for psychiatric rehabilitation. Second, a psychiatric rehabilitation assessment needs to focus on describing clients' skills and environmental supports in relation to their overall rehabilitation goals.

COMPONENTS OF PSYCHIATRIC REHABILITATION ASSESSMENT

The psychiatric rehabilitation assessment evaluates the client's skills and supports in the context of the environment in which the client chooses to live, learn, socialize, and work. The assessment contains three components: an overall rehabilitation goal, a functional assessment, and a resource assessment. The overall rehabilitation goal is typically determined by means of an interview. The overall rehabilitation goal identifies the particular environments in which the client chooses to live, learn, socialize; and work during the next 6 to 18 months. The particular environment may be one the client currently is in and in which the client wants to stay; or the environment may be one the client desires to move to within the next year or two. After the goal environment has been determined, assessment instruments may then be used to complement the interview process to help the client figure out what skills and supports need to be developed to maximize their success and satisfaction in the chosen goal environment(s).

The overall rehabilitation goal is established during a series of interviews with the client in which the client's satisfaction and dissatisfaction with the current environment and choice of future environment is explored. The overall rehabilitation goal is critical to the assessment because the hope of its achievement motivates the client to engage in the assessment. In addition, the overall rehabilitation goal focuses the practitioner and

client on those skills and supports that are relevant to success. Setting goals affects performance whether a person is disabled or not. A number of early experimental studies have shown the positive effects of setting goals (Locke, Shaw, Saari, & Latham, 1981). "Goals affect performance by directing attention, mobilizing effort, increasing persistence and motivating strategy development" (Locke et al., 1981, p.125). In addition, the overall rehabilitation goal focuses subsequent assessment of the client by limiting the skills and supports assessed to those that are relevant to satisfaction and success in that goal environment. The following are examples of overall rehabilitation goals:

- To live at Mulberry House with my girlfriend until November 2002
- To work in transitional employment by June 2000
- To study at a supported learning program at Worcester State College by 2002

The necessity of establishing the client's overall rehabilitation goal is consistent with the philosophy of psychiatric rehabilitation (Anthony, 1982; Cnaan, Blankertz, Messinger, & Gardner, 1988). Taking the time to work with the client to set overall rehabilitation goals is also important because if this process is neglected, the practitioner and client very likely may be pursuing different goals without knowing it. Research evidence suggests that assessments of clients by practitioners and assessments by clients themselves often have little or no agreement on items as diverse as potential for recovery (Blackman, 1982), desired outcomes (Berzinz, Bednar, & Severy, 1975), rehabilitation issues (Leviton, 1973), perceptions of handicapping problems Mitchell, Pyle, & Hatsukami, 1983; Tichenor, Thomas, & Kravetz, 1975), and the existence of functional skills (Dellario, Anthony, & Rogers, 1983). For example, Dimsdale, Merman, and Shershow (1979) studied a group of hospital patients in which the staff viewed insight as the primary goal. The patients, however, placed insight at the bottom of their list of goals. Other research indicates that when clients' and practitioners' goals are incongruent, clients do not appear to profit from therapy, are disappointed with their care, and often fail to comply with their treatment activities (Goin, Yamamoto, & Silverman, 1965; Lazare, Eisenthal, & Wasserman, 1975; Mitchell et al., 1983).

Sometimes the reasons for not involving clients in goal-setting stems from the mistaken belief that people with psychiatric disabilities are unable to make decisions or choices. However, some authors have suggested that the inability of persons to make choices and set goals was more related to the clients' treatment environments than to the clients themselves. For example, Ryan (1976) wrote that the psychiatric treatment environment itself can take away a person's ability to make important life decisions and that the process of institutionalization results in a loss of initiative, an assumption of deviant values, and an inability to make decisions (Goffman, 1961; Schmieding, 1968).

Other researchers hold the view that impaired decision-making ability or poor goal-setting is inherent in the pathosis of mental illness. For example, the three major types of problems associated with schizophrenia include positive symptoms (e.g., hallucinations, delusions), negative symptoms (e.g., withdrawal, *lack of goal-directed behavior*, and motivation), and disordered relationships (e.g., lack of personal ties). Of these three, negative symptoms are thought to be prognostically most important and are

viewed as the source or result of chronicity (American Psychiatric Association, 1994; Keith & Matthews, 1984; Strauss, Carpenter, & Bartko, 1974).

Apart from disagreement as to whether persons with psychiatric disabilities can make their own choices or state their own needs, most people agree that setting goals in treatment is important. Some research evidence suggests that goal-setting itself impacts outcome (Smith, 1976) and that the attainment of goals affects satisfaction and recidivism (Willer & Miller, 1978). Unfortunately, for many years mental health professionals resisted adopting goal-setting as a regular part of their practice (Holroyd & Goldenberg, 1978) and, in particular, goal-setting that reflected the consumer's perspective about desired rehabilitation outcomes (Farkas, Cohen, & Nemec, 1988).

Several studies examining vocational programs and client preference have reported on the relationship between consumer choice and rehabilitation outcome (Becker, Drake, Farabaugh, & Bond, 1996; Bell & Lysacker, 1996). Becker et al. (1996) found that clients in a supported employment program who obtained employment in their *chosen* employment areas were more satisfied with their jobs and remained in their jobs twice as long as those who worked in nonpreferred job areas. Bell and Lysacker (1996) randomly assigned three groups of veterans in a vocational program to three different conditions: (1) those required to work at least 20 hours a week; (2) those required to work at least 10 hours a week but who could, if they wished, work up to 20 hours; and (3) those who *chose* to work as few or as many hours as they wanted up to a maximum of 20 hours a week. Participants who were permitted to choose the number of hours worked actually worked more hours per week than people in the other conditions and reported a greater reduction in symptoms than participants required to work at least 10 hours per week. In summary, the research clearly supports the importance of helping clients choose their overall rehabilitation goals during the first stages of the assessment process. It is only after an assessment of the person's overall rehabilitation goal by means of a skilled interviewer that more formal assessment instruments are used to assess the person's skills and supports in relation to the demands of the person's goal environment(s).

PSYCHIATRIC REHABILITATION ASSESSMENT INTERVIEW

The psychiatric rehabilitation assessment typically begins with a series of interviews with the client. There are two principles guiding the assessment interview. First, the practitioner attempts to maximize the involvement of the client in the interview process. Second, the information collected during the interview is recorded in a way that maximizes the client's understanding of the assessment results.

Involving the client in the interview means facilitating the client's active participation in completing each of the tasks that are part of doing a rehabilitation assessment. Client involvement increases the client's ownership of the rehabilitation assessment. An important ingredient of the assessment process is the interpersonal skill of the person conducting the assessment (Anthony, Pierce, & Cohen, 1980). Several practitioner skills serve to involve the client in the assessment. These skills include orienting, giving instructions, requesting information, and demonstrating understanding throughout the interview.

Orienting means that the practitioner describes the task, the purpose of the task, and the roles of both the practitioner and client. The orientation gives a clear picture of what will happen and how the client is expected to participate. This sort of preparation or "role induction" contributes to positive outcomes in counseling relationships (Orlinsky, Grawe, & Parks, 1994) and can be especially valuable for clients who lack experience or knowledge of expectations from a counseling-type interaction (Sue, Zane, & Young, 1994). The way the practitioner orients the client is important. The practitioner should use language that the client is likely to understand, pace the orientation to maintain the client's attention and interest, and frequently check out the client's understanding of what the practitioner has previously said. An orientation at the beginning of a functional assessment might sound like this (the practitioner is speaking):

"The first task in functional assessment is listing critical behaviors. The goal of listing is to write a list of all the skills that you need to successfully live at home with your family. First, you and I will name the behaviors your family expects you to do, and second, you will tell me about the things that you want to be able to do. I will be asking you questions and summarizing what you say to make sure that I understand what you are saying. I want you to honestly share your thoughts and feelings and ask questions when you are unclear about something. Just to make sure that I'm being clear now, please tell me, in your own words, what will happen next."

Giving instructions is similar to orienting in that both provide direction. Giving instructions, however, specifically directs a person to perform a particular action or set of actions. The instructions tell a person what exact steps to follow. For example, the practitioner might give instructions during the functional assessment like this:

"Read over this list of types of mental health services, and circle the ones that you have used in the past month."

Giving instructions can be combined with reorienting as needed to provide structure to the interview. For example, a practitioner might remind someone of the focus of the assessment by saying, "Remember that we're here to figure out what work skills you have. Right now I would like you to answer my questions with your feelings and experiences from your last job, rather than talking about your roommate."

Requesting information encourages participation rather than directly telling the client how to be active. Requesting information is asking for facts, opinions, and feelings. Requesting information encourages someone to talk about a particular topic. Open-ended questions are especially valuable for encouraging dialogue. For example, the open-ended question, "What did you like best about living in the rooming house?" is likely to encourage participation more than the direct and closed-ended question, "Did you live on the ground floor?" Indirect leads (Gerber, 1986) provide another way of inviting discussion, such as, "Tell me about a time when you asked a teacher for help," or "Give me an example of something your sister does that bugs you."

Demonstrating understanding is capturing in words what the client is feeling or thinking. Demonstrating understanding-also known as active listening (see, for example, Egan, 1999) and paraphrasing or reflecting feelings (see, for example, Carkhuff, 2000)—tells the client that the practitioner is listening and helps clarify the client's perspective. In the following sample dialogue that might occur in response to the indirect lead about the irritating sister, the practitioner demonstrates understanding of the client's feelings and view of the situation:

Client: "What bugs me? She treats me bad. She never listens."

Practitioner: "You're angry with her because she hurts you."

Client: "Yeah, I keep trying to tell her that she's cruel to me, but she just doesn't listen. Maybe she doesn't care."

Practitioner: "You think it doesn't matter to her how you feel about how she treats you."

The practitioner's interpersonal skills facilitate client involvement and are key to developing an active partnership (Danley, MacDonald-Wilson, & Hutchinson, 1998; Mosher & Burti, 1992) during the assessment. However, many people with severe psychiatric disabilities have difficulties participating in an interview. They may be accustomed to psychiatric interviews that focus on their symptoms, maladaptive behaviors, and probable causes of impairment (Kramer & Gagne, 1997). People who have spent years receiving mental health services may be "trained" to wait for direct questions and then to provide only the information requested. Negative experiences, lack of trust, and difficulty concentrating can interfere with someone's ability to connect. When the client does not participate in the interview without assistance, the practitioner needs to work at connecting and can benefit from using the practitioner skills described.

A structured assessment instrument can be used to supplement the rehabilitation assessment interview. Ideally, an instrument is used to save time, money, and/or effort while providing the same information that would otherwise be obtained through the interview or direct observation. Another benefit of using a test in psychiatric rehabilitation assessment is that a "good" test—one that is valid and reliable—provides some standardization. This may be important if the goal of assessment is comparison of clients to one another, to certain norms, or to themselves at different points in time. In this way, tests can provide assessment information that could only be estimated from an interview (e.g., IQ, aptitude scores, interest profiles).

Most instruments are beneficial if incorporated at the initial stages of exploration, providing some structure and a "shortcut" for gathering information. In addition, the use of instruments may be especially beneficial with clients needing structure and/or who are limited in their verbal expression. Novice interviewers may also benefit from having a structured format, as might any interviewer who, without a structured or standardized procedure, may omit assessment of some important area.

In clinical assessment situations, the assessment process itself must begin and end with the client. Before any instruments are used, the practitioner attempts to obtain the client's perspective on the client's skill and resource strengths and deficits. The assessment can then proceed to acquiring information from significant others, testing, and/or observations in simulated environments. The practitioner must use the information collected by such standardized instruments in a conservative way. The information is just one source of data. Indeed, it is the focus and conduct of the assessment process, rather than the assessment instruments, that are the foundation for a valid assessment. Frey (1984) has noted the limitations of assessment instruments: "Any attempt to capture, through single measures, an individual's status in a way that reflects all that is important to the rehabilitation process is ostentatious, to say the least" (p.35).

One response to this predicament is to teach practitioners general assessment skills and how to use a specific instrument or assessment battery. Psychiatric rehabilitation

assessment skills permit the practitioner to conduct a truly personalized and comprehensive assessment. Without a skilled practitioner, assessment can revert to a simple checklist of client functioning, seemingly independent of the client's high-priority goals and the specific requirements of the client's own environment.

From the many instruments available, the practitioner must select the instrument most relevant to the specific client assessment situation. However, there are certain critical characteristics of assessment instruments of which the practitioner should be aware and that can facilitate the practitioner's selection of a particular instrument. These critical characteristics are similar to the characteristics that are important in recording assessment information. A useful instrument should be clear, brief, environmentally specific, and skills- and/or resources-oriented.

Clear: As discussed earlier, the practitioner involves the client throughout the assessment interviews. The client also should be involved in the administration of any assessment instruments. The instrument itself, the process of administration, and the results all need to be comprehensible to the client. The language of the instrument must be fairly simple and concrete. Language such as "gets lost" or "runs into walls" is preferable to "gross spatial and perceptual disorientation." Similarly, "arrives on time" may be preferable to "punctual." The use of the instrument must be clearly relevant to the client's situation. The practitioner using a particular instrument is aware of the reasons for the choice and needs to communicate these reasons to the client. An orientation to the process and purpose of using an instrument is given, along with good instructions.

Brief: Brevity and simplicity in administering an instrument will facilitate its use within the assessment interview. A brief instrument will be easier to integrate into the assessment and less likely to change the interview from individualized exploration to rote and mechanical measurement.

Environmentally specific: Identification of the environment in which the person is expected to function is required for a meaningful assessment of a client's level of functioning. Ideally, then, an assessment instrument would determine performance within a particular environment. A standardized instrument, by definition, cannot provide adequate specificity if designed for broad use. It may be developed for use in a particular type of environment, such as a rooming house or a transitional employment program, but would still miss some of the environmental requirements of a particular rooming house or a specific transitional employment placement. An instrument could be developed for an environment by tailoring it to the requirements of that setting. For a treatment program, this could be based on the entrance and exit criteria for the program. A skills-oriented assessment might list the skills a person must demonstrate to be admitted to the program and the skills required before the person could be discharged as a "successful graduate." With some attention, such an instrument could be reliable and valid, offering the opportunity for program evaluation data collection and clinical assessment.

Skill/resource focused: For use in the functional assessment part of the psychiatric rehabilitation assessment, an instrument needs to be skills oriented and, ideally, will assess both skill strengths and skill deficits. Skill-focused instruments need to contain items that are behavioral, observable, and measurable. Separate instruments may be

needed that focus on resources, indicating resources that are needed, available, and accessible to the client.

Documenting assessment results is another potential area for developing a partnership between client and practitioner. Once all the data are gathered, the assessment information should be recorded and organized in such a way that the client understands the completed assessment because developing a partnership between client and practitioner requires an opportunity for the client to access and review the assessment results. Of course, the information gathered from a psychiatric rehabilitation assessment must be recorded in a way that is consistent with agency record-keeping requirements. Even so, assessment records within an agency often vary in the details recorded and the format of the record.

PSYCHIATRIC REHABILITATION ASSESSMENT INSTRUMENTS

The focus on outcome assessment in psychiatric rehabilitation services has increased recently with the advent of managed care and the mandate to evaluate outcomes of care (Sederer, Dickey, & Hermann, 1996). Outcome assessment can occur at the level of the individual, the program, and/or the system (Blankertz & Cook, 1998). At the individual level, one can examine clinical outcomes, satisfaction, and service utilization (Sederer, Dickey, & Hermann, 1996). In the clinical outcome area, literally hundreds of assessment instruments, varying greatly in their focus, exist for use with persons with psychiatric disabilities. Some measures focus on psychiatric diagnosis and symptoms, some on neuropsychological functions, some on behavior and skills, some on functioning and status, and some on resources (both those needed by and/or available to the client). Many instruments contain items from a variety of these domains (Dahlstrom, Welsh, & Dalstrom, 1972; Derogatis, 1994; Derogatis, Rickels, & Rock, 1976; Eisen, Dill, & Grob, 1994; Honigfeld & Klett, 1964). Measures that are reliable and valid are needed to both assess the outcome of service programs and to provide data on the skills and resources strengths and needs of the individual to plan interventions to address those needs.

A number of literature reviews have surveyed a variety of existing instruments potentially useful to psychiatric rehabilitation assessment. Anthony and Farkas (1982) and Farkas and Anthony (1987) described data collection strategies and instruments capable of measuring a broad range of possible client characteristics. The authors included a useful table of references that indicates the focus of the instrument, the person who completes it, the original population for whom it was developed, and information on reliability and validity. Anthony, Cohen, and Nemec (1987) reviewed assessment instruments that measure skills and supports and are useful in psychiatric rehabilitation.

Beattie and Stevenson (1984) focused on the conceptualization and measurement of social functioning in outcome studies of mental health treatment. Although not describing individual instruments in detail, these authors provided some useful information for considering what instruments are best in a particular instance. Sederer and Dickey (1996) review a number of instruments useful in Outcome assessment in clinical practice, including those that focus on global well-being, functioning,

symptoms, satisfaction, and service use. Chapters in this book describe the instruments and their psychometric properties, and selected instruments are included in the appendices. In addition, Blankertz and Cook (1998) have outlined principles and criteria for choosing and using outcome measures in psychiatric rehabilitation, and Cook (1992) reviewed outcome measures in vocational and residential environments and measures of social skills. Weissman (1975), Weissman and Sholomskas (1982), Dickerson (1997), Scott and Lehman (1998), and Wykes (1998) reviewed instruments that assess the social adjustment and social functioning of psychiatric clients. The instruments are described and evaluated according to criteria presented by the authors. Newman (1980) and Goldman, Skodol, and Lave (1992) offered a review of global scales, discussing their strengths and problems. Ciarlo, Edwards, Kiresuk, Newman, and Brown (1981) presented detailed information on a number of assessment instruments in the form of a directory. Wallace (1986) and Vaccaro, Pitts, and Wallace (1992) have reviewed functional assessment instruments for people with severe psychiatric disabilities.

In following one of the principles of outcome assessment outlined by Blankertz and Cook (1998), outcome measures should focus on changes in real-world behaviors, activities, or social status. A brief overview of symptoms, health status, and global functioning or status measures is presented to provide a comprehensive assessment profile and outcome evaluation approach. However, this section primarily describes instruments that are used to assess individual-specific skills and resources useful for planning and implementing rehabilitation interventions.

Symptom/Diagnostic Instruments

The preponderance of the assessment literature for people with psychiatric disabilities is in the area of psychiatric symptoms and diagnosis. Although this is not intended to be a comprehensive review of such measures, several selected instruments with adequate psychometric properties are described that have been used with this population. Readers are referred to Glynn (1998) and the chapter on psychopathology in this volume for additional detail on measures of symptoms.

The Structured Clinical Interview for DSM-IV (SCID) is a structured interview intended to improve the accuracy and reliability of psychiatric diagnosis according to the *Diagnostic and Statistical Manual*, 4th ed. (First, Gibbon, Spitzer & Williams; 1997). The Brief Psychiatric Rating Scale (BPRS) is an 18-item rating scale measuring severity of symptoms completed after conducting a semistructured interview with the individual (Overall & Gorham, 1962). Both measures have been used widely, particularly in research studies. The Symptom Checklist-90-R (SCL-90-R) is a 90-item self-report inventory designed to measure psychological symptomatic distress (Derogatis, 1994). It is designed to function as both a brief screening instrument and as an outcome measure of psychological distress. Four other instruments are useful to make distinctions between specific syndromes or patterns of symptoms: the Positive and Negative Syndrome Scale (PANSS; Kay, Fiszbein & Opler, 1987), the Scale for the Assessment of Positive Symptoms (SAPS; Andreasen, 1984), the Scale for the Assessment of Negative Symptoms (SANS; Andreasen, 1983), and the Schedule for Affective Disorders and Schizophrenia (SADS; Endicott & Spitzer, 1978).

Health Status

Assessment of health status and needs has increased in the past few years with people with psychiatric disabilities. Physical health is a significant problem with this population that often goes unrecognized and untreated (Skriner & Hutchinson, 1994). Most health measures have been validated on general populations, and a few have included populations of people with psychiatric disorders. The MOS 36-Item Short-Form Health Survey (SF-36) was developed as a brief version of the Rand Medical Outcomes Study on the effect of various health care structures on the health status of people with chronic conditions (Ware & Sherbourne, 1992; Ware, Snow, Kosinski, & Gandek, 1993). It can be administered as a brief interview or self- report instrument and measures physical, emotional, social, and mental health functioning. The Sickness Impact Profile (SIP) is a behavioral measure of dysfunction related to illness (Bergner, Bobbit, Carter, & Gilson, 1981). The SIP contains three major dimensions: independent categories (e.g., eating, recreation, work), physical (e.g., mobility, body care, movement), and psychosocial (e.g., social interaction, emotional behavior, communication). The Quality of Well Being scale (QWB) was designed to measure the impact of health programs on the health status of different groups of people (Kaplan, Bush, & Berry, 1976). The International Classification of Functioning and Disability (1999) (formerly the International Classification of Impairments, Disabilities and Handicaps) (ICIDH-2) developed by the World Health Organization is a classification system of body structures and functions, activities and behaviors, and participation in roles in society based on WHO's model of the disablement process. It is intended to be a universal system categorizing both strengths and limitations caused by medical conditions for use in research and clinical work across cultures in the world and is currently in the process of testing and field trials.

Global Functioning/Status Measures

Functioning refers to activities or performance, "a natural or proper action for which a person, office, thing or organization is fitted or employed" (Webster's, 1990, p.677). An assessment of functioning may focus on global functioning or specific evaluation of skills and behaviors. Global measures might emphasize performance in particular roles (e.g., spouse, worker), performance in particular domains (social, emotional, psychological), or status (employment, educational, residential) to indicate functioning. At times, global functioning instruments also include measures of symptoms. Global measures focus on the outcome of functioning (e.g, has been employed full time, is married, has friends), whereas skill assessments focus on specific sets of behaviors (e.g., initiating conversations, expressing feelings, budgeting money). Functional assessment in psychiatric rehabilitation involves the latter. However, measures of global functioning are often used in outcome assessment approaches and are briefly described here. Most of the measures of global functioning include both symptoms and general functioning.

The Behavior and Symptom Identification Scale (BASIS-32) is a 32-item self-report measure that includes items related to symptoms and role functioning (Eisen, Dill, & Grob, 1994). Respondents rate the degree of difficulty with each item. It contains five subscales: relation to self and others, daily living and role functioning, depression and anxiety, impulsive and addictive behavior, and psychosis. The Global Assessment of Functioning Scale (GAF) (Is a clinician-rated, single-item measure that was included as a measure of Axis V in the DSM-III-R and revised for DSM-IV (APA, 1994; Goldman, Skodol, & Lave, 1992). The clinician assigns a number on a continuum from 0 to 100, which represents the person's overall functioning in psychological, social, and occupational domains, using behavioral descriptors to assign a rating.

The Disability Rating Form is a 5-item scale that focuses specifically on the areas of functioning affected in people with psychiatric disabilities that are used by the Social Security Administration to define disability (Hoyle, Nietzel, Guthrie, Baker-Prewitt, & Heine, 1992). It is a brief instrument completed by a clinician who knows the person well with ratings in the following five areas: activities of daily living, social functioning, concentration and task performance, adaptation to change, and impulse control. Each item is rated on a 5-point scale of severity of disability (with descriptors of each rating) and duration of disability in each area. The Role Functioning Scale (RFS) is another brief measure that includes four single-item scales evaluating the functioning in the areas of working/productivity, independent living and self-care, immediate social network relationships, and extended social network relationships (Goodman, Sewell, Cooley, & Leavitt, 1993). Each item is rated on a 7-point scale from minimal to optimal functioning, with behavioral descriptions of each rating. The Multnomah Community Ability Scale is a 17-item clinician-rated scale (Barker, Barron, McFarland, & Bigelow 1994). Each item is rated on a 5-point scale representing ability to disability. Domains covered include those related to symptoms and health, activities of daily living (e.g., managing money), social competence (e.g., social interest, social network), and behavioral problems (e.g., impulse control, substance abuse). Very few items specify skills in behavioral, measurable terms. The Life Skills Profile (LSP) is a 39-item, 5-scale instrument developed to measure function and disability in adults with schizophrenia (Rosen, Hadzi-Pavlovic, & Parker, 1989). It is completed by someone who knows the person well. Items are jargon-free and not based on symptoms but on behaviors and problems associated with schizophrenia. Each item is rated on a 1 to 4 scale on the basis of the amount of difficulty the person has on the item. The five subscales are self-care, nonturbulence, social contact, communication, and responsibility. Some items could be considered skills, but the emphasis is on limitations or difficulties in functioning, not on performance of specific skills. The Slaton-Westphal Functional Assessment Inventory (SWFA) is a new 77-item instrument, developed to be used by clinicians in assessing levels of functioning on nine sub scales: adaptation to mental illness, substance abuse, basic needs, finances, social relations/support system, recreation/leisure, employment/education, physical health, and institutional placement (Slaton & Westphal, 1999). Items are rated on a 6-point frequency scale (from never to always) with descriptive anchors. Some of these items may be based on skills used in the community, and reliability tests were done on a population of people involved in psychiatric rehabilitation programs in Louisiana. Although promising, additional testing of psychometric properties, especially validation

studies, is necessary. In addition, review of specific items for their relationship to residential or community skills versus domains of functioning is needed to evaluate the measure's usefulness as a skills-oriented assessment instrument.

Skills Oriented Instruments

A number of instruments with a functional focus have been developed for use with persons with psychiatric disabilities. The initial impetus for development of these instruments was, in part, the establishment of the Community Support Program of the National Institute of Mental Health (Stroul, 1984; Turner & TenHoor, 1978). Designed to pilot federal-state collaborative efforts to deliver community-based services to persons with severe psychiatric disabilities, the Community Support Program sponsored the development of instruments to identify the target population, determine the needs for service, and evaluate changes or treatment outcome. The following is a description of instruments assessing skills related to particular environments-the residential, social, vocational, or educational environments.

Residential/Community Environments

Many states developed their own forms for measuring the functional levels of their Community Support Program clients. These forms often include rating of client skills. The CSS-100 (New York State Office of Mental Health, 1979) was used by many community support systems. Separate scales measure adjustment to environment (e.g., using public transportation, managing funds, dressing self) and behavior problems or symptoms (e.g., hospitalization, employment-related services, community living programs, socialization activities). Similarly, the Multi- Function Needs Assessment (Angelini, Potthof, & Goldblatt, 1980) used in Rhode Island and Connecticut included assessment of functioning (self-care, household skills, personal appearance), psychiatric symptoms, and current use of services. It has been revised (Weiner & Michaels, 1987) and used in a Hawaii state hospital, with the independent living skills and public behavior scales discriminating groups of psychiatric inpatients at various functional levels (Weiner, 1993). Other forms, developed along the same lines, have been used in New Jersey (New Jersey Division of Mental Health and Hospitals, 1979) and Michigan (Cornhill Associates, 1980).

The Katz Adjustment Scale (Katz & Lyerly, 1963) was developed many years before the Community Support Program but is still in use in a variety of settings. The wide use of this scale is most likely the result of the considerable data available on reliability, validity, sensitivity, and norms, as well as materials for use in training staff to administer the scale (Weissman, 1975). Although many items measure psychiatric symptoms (e.g., has trouble sleeping, attempts suicide, talks to himself or herself) and behavioral excesses (e.g., has periods when he or she can't stop moving, has temper tantrums), this scale includes items measuring community adjustment skills. Skills assessed include physical skills (e.g., helps with household chores), emotional/interpersonal skills (e.g., gets along with neighbors), and intellectual skills

(e.g., helps with the family budgeting). The skills are often phrased positively (i.e., "the client does this") and are rated on a frequency scale (i.e., "is not doing, is doing some, is doing regularly"). The measurement provides a picture of skill strengths and skill deficits.

The Independent Living Skills Survey (ILSS) is a clinician-rated or self-administered inventory of activities of daily living (Wallace, Kochanowicz, & Wallace, 1985). Items are rated on the frequency of occurrence of the behavior (i.e., never, sometimes, often, usually, always) and the degree of behavioral problem (always a problem to never a problem) during the past month (Wallace, 1986). This scale does not include social-emotional or interpersonal skills. Another detailed scale is The Community Competence Scale. It is a 128-item, semistructured interview that includes 18 subscales (Searight, Oliver, & Grisso, 1983). Most items require the person being interviewed to perform a task or provide factual information, whereas the remaining items require a response requiring judgment or reasoning. Subscales cover such factors as managing money, caring for medical needs, proper diet, social adjustment, and judgment.

The St. Louis Inventory of Community Living Skills is a more recent instrument and was designed to focus on discrete community living skills and be used to evaluate rehabilitation programs, to specify a residential placement, or to measure the impact of skills training interventions (Evenson & Boyd, 1993). It is a 15-item instrument rated on a 7-point scale from few or no skills to very adequate skills. Each item is given descriptors, or anchors, and raters are instructed to rate behaviors that they observe, not potential ability. Items cover skills in personal care/physical skills (personal hygiene, grooming, dress skills, self-care, health practices, meal preparation, clothing maintenance), social skills (communication, sexuality, leisure activities, use of resources), and intellectual skills (handling money, handling time, safety, problem solving). It seems effective in differentiating between people in three levels of residential care compared with other measures of global functioning (Fitz & Evenson, 1999).

Social Environment

Although many of the instruments listed in the residential environment include assessments of social skills, behaviors, and activities, there are several measures that specifically emphasize social or interpersonal skills. Many of these measures were developed to examine the effects of behavior therapy interventions used to increase the social skills of people with severe psychiatric disabilities. For a more in-depth review of measures of social skills, refer to Hersen and Bellack (1977) and Wallace et al. (1980).

The Social Performance Survey Schedule (SPSS) is a 100-item self-report inventory that can also be completed by significant others (Lowe & Cautella, 1978). The items are rated on how frequently the person demonstrates the positive or negative behaviors in question. Another self-report inventory is the Rathus Assertiveness Schedule (RAS; Rathus, 1973). The RAS is a 30-item measure designed to assess assertiveness. Items are rated on a 6-point scale on the extent to which the item is true for the individual. Although developed initially on a nonpsychiatric group of people who were

participating in assertiveness training, the measure appears to be a reliable and valid measure of assertiveness skills.

There are several role-play tests that assess social skills. One is the Interpersonal Behavior Role Playing Test (IBRT; Goldsmith & McFall, 1975). The respondent views 2S tape-recorded simulated interpersonal situations and is asked to role-play a response to the situation. Responses are then rated on a scale of 0 to 2, with the highest score representing those who met the minimum standard for competence in that situation. The situations were drawn from the Interpersonal Situation Inventory (Goldsmith & McFall, 1975), which is a self-report version of this test in which respondents rate themselves on a 5-point scale of how comfortable and competent they feel in the situation described. The Simulated Social Interaction Test (SSIT) is a role play test of social skills in dealing with eight simulated anxiety-provoking situations (Curran, 1982). A narrator describes a situation, and a confederate delivers a prompt, to which the individual responds. Trained raters then score the responses on social skill competence. Training of raters is extensive and time intensive.

More recent measures of social skills have incorporated recent research into the cognitive component of social skills. The Assessment of Interpersonal Problem Solving Skills (AIPSS) is a videotaped role-play test of social skills in which an individual is shown a series of interpersonal problem vignettes and is asked to identify the problem, describe a solution, and role-play that solution. A trained rater then rates the various components or subscales of the receiving, processing, and sending skills model of social skills developed by Wallace (Donahoe, Carter, Bloem, Hirsch, Laasi, & Wallace, 1990). The Social Problem Solving Assessment Battery (SPSAB) is a battery that incorporates a role-play test to measure social skill and problem-solving ability (Sayers, Bellack, Wade, Bennett, & Fong, 1995). The intent of the measure is to evaluate the skills that enable individuals to identify social problems, generate response alternatives, evaluate the effectiveness of responses, and carry out effective interactions. One major feature of this tool was the involvement of family members, providers, and people with schizophrenia in identifying the problem situations. The battery contains three assessments: a Role-Play Test (RPT), a Response Generation Test (RGT), and a Response Evaluation Test (RET). The RPT involves six role plays that involve a confederate and are videotaped. The RGT involves six videotaped interactions between two individuals who have a conflict or problem, and the individual attempts to identify the problems and propose solutions. The RET consists of 12 audiotaped interactions, both effective and ineffective, that the individual rates on a 5-point scale of effective to ineffective.

Vocational (Work) Environment

Designed to measure vocational skills of clients with psychiatric disabilities, the Standardized Assessment of Work Behavior (Griffiths, 1973, 1975, 1977; Watts, 1978) assesses a broad range of skills (e.g., uses tools/equipment, communicates spontaneously, grasps instructions quickly). Items are rated on a continuum from skill strength (e.g., looks for more work) to skill deficit (e.g., waits to be given work) Reliability and validity data are available for this scale.

Another scale, also with a vocational focus, has been developed for use with all disability groups. The Functional Assessment Inventory (Crewe & Athelstan, 1984 focuses exclusively on functional limitations. Seven major functional dimensions are assessed: adaptive behavior, motor functioning, cognition, physical condition vision, and vocational qualifications. Not all these areas measure skills, and, where they do, the focus is on assessing deficiencies in functioning. Some items look at strengths, but these are considered "moderator variables" rather than items of equal weight to the limitation; that is, they are meant to account for positive attributes or abilities that appear to override limitations. Both reliability and validity data are available.

Another situational assessment instrument is the Situational Assessment: Scales to Assess Work Adjustment and Interpersonal Skills (Rogers, Hursh, Kielhofner, & Spaniol, 1990; Rogers, Sciarappa, & Anthony, 1991). Rogers et al. (1990) described a process of conducting a situational assessment process, as well as development of the situational assessment instrument. The instrument contains two separate scales consisting of 21 work adjustment skills and 14 interpersonal skills. Each item is rated on a behaviorally anchored rating scale based on observation of the person in a preferred work environment. Although reliability was good, the sample was too homogeneous (few people obtained employment) for predictive validity. Al~ items are written in behavioral language and represent the general work skills and interpersonal skills required in most jobs.

A third situational assessment instrument is the job Performance Evaluation Form (Schulteis & Bond, 1993), an adaptation of the Thresholds Monthly Work Evaluation Form (Bond & Friedmeyer, 1987). This form is a 25-item checklist of items in four categories: work readiness (e.g., attendance, grooming), work attitudes (e.g., accepts responsibility, flexibility), interpersonal relations (e.g., cooperation and rapport with coworkers), and work quality and performance (e.g., follows directions, accuracy). Each item is rated on a 3-point scale of needs improvement, meets expectations, or highly satisfactory.

The Work Behavior Inventory (WBI) is a 36-item work performance assessment instrument specifically designed for people with severe mental illness (Bryson, Bell, Lysaker, & Zito, 1997). This measure is intended for use in observing the person in a real work situation and consists of five subscales: work habits, work quality, personal presentation, cooperativeness, and social skills. Items are rated on a 5-point scale from consistently inferior to consistently superior. This brief instrument has acceptable reliability and validity and was shown to predict hours worked and money earned, as well as discriminating between those who worked after the program from those who did not (Bryson, Bell, Greig, & Kaplan, 1999). Although most items are behavioral in nature (i.e., accepts constructive criticism, takes initiative when work is available), there are a few items that require some judgment (i.e., does not appear overly distant or aloof, seems comfortable when approached by others) or describe what the person should not do (i.e., refrains from inappropriate joking, does not become overexcited or aggressive).

Educational (School/Training) Environment

A review of the literature in supported education revealed few instruments that are available to assess the educational skills of students with psychiatric disabilities. Although academic assessment may include standardized achievement and literacy tests, little focus is on the skills needed by students to succeed in educational settings, such as skills in note-taking, test taking, using campus resources, and connecting with other students. A search of the ERIC database revealed a few measures of study habits that are not widely circulated and have little reliability or validity data available. One checklist developed specifically for students with psychiatric disabilities receiving supported education services is the Student Skills in Educational Settings (Walsh, Sharac, & Sullivan, 1989). Although unpublished, it can be used with students to identify their skill strengths and deficits. Skills are categorized into four groups: environmental skills (i.e., commuting to campus, using administrative services, applying for financial aid), academic skills (i.e., using college resources, preparing for tests, in class participation), emotional skills (i.e., managing emotions, responding to feedback), and social skills (i.e., meeting new people, participating in on-campus groups). Although no reliability or validity data are available, it is one of the instruments developed specifically for students with psychiatric disabilities.

Resources Oriented Instruments

Few scales are currently in use that focus on resources and that can be helpful during a resource assessment. Most common are social measures (see Beels, Gutwirth, Berkeley, & Struening, 1984, for a review). Assessments of other types of supports (e.g., income, mental health services) exist as a part of some checklists but are not widely used. The Multi-Function Needs Assessment (Angelini et al., 1980) includes a "Current Services Profile," which lists services received during the previous month and the approximate amount of service (in hours per week) received. Although no indication of the needed services that are not being received is included, the Current Services Profile does list a broad range of resources: people (e.g., a friendly visitor), places (e.g., a child daycare center program), things (e.g., prosthetics, medication), and activities (e.g., recreational therapy).

Another community support program instrument is the Services-Utilization and Need Assessment (State of Alabama Department of Mental Health Services, 1984). Quite comprehensive, this instrument lists service needs, service provider (i.e., if service need is being met), and barrier to service (if service need is unmet). Types of resources assessed include people (e.g., crisis service provider, advocate), places (e.g., nutrition center), things (e.g., transportation, medication), and activities (e.g., training, planned recreational activity). Although reliability and validity data are not yet available, ongoing studies suggest the instrument is favorable in both areas.

A more recent instrument is the Needs and Resources Assessment Interview (Corrigan, Buican, & McCracken, 1995). This interview or self-report instrument combines identification of needs in specific domains of functioning with a review of the resources required to meet the identified needs. Individuals are also asked to rate their satisfaction with functioning in each of the domains, as well as to rate the importance of the need. The domains reviewed include housing, physical health teeth, mental health,

income and finances, education, job status, friends, family leisure time, spiritual life, legal problems, and drug-related problems. A similar type of instrument is the Camberwell Assessment of Needs, a structured interview that focuses on 22 areas of functioning (Phelan, Slade, Thornicroft, et al., 1995). Needs are identified by asking about difficulties in each area. The individual is also asked about how much help is received from friends and relatives, as well as service providers. The last section outlines the type of assistance needed as identified from the individual's perspective, and a care plan is developed.

One instrument that attempts to capture both social support and social networks is the Triangle Social Network/Social Support Protocol (Estroff, Illingworth, Lachiotte, & Schwartz, 1992). Social support consists of instrumental support (i.e., food, money, shelter) and relational or affective support, measured by the quality of relationships. Social network includes the number and type of people in the network, amount of contact, and length of relationship.

In the area of social supports, the Pattison Psychosocial Kinship Inventory (Pattison, De Francisco, Wood, Frazier, & Crowder, 197S) offers a systematic method for assessing the social system of an individual. The instructions specify which people to list on the instrument: "anyone important in your life; anyone important not listed above but who is significant to you." They may be persons who you see every day or only occasionally; persons who are strategically important to you; or those who are important because you specifically don't like them or they cause you difficulty. Thus, the instrument lists resource people who provide support, as well as those who may cause distress.

There are several other types of social support measures. One is the Network Analysis Profile (Cohen & Sokolovsky, 1979), which gathers data from observation, activity logs, network profile questionnaires and interviews, and is sensitive to low-intensity interactions that may be characteristic of people with severe psychiatric disorders. Another is the Arizona Social Support Interview (Barrera, 1981), which measures the size of the network, frequency of support, and satisfaction with support. A third is the Norbeck Social Support Questionnaire (Kahn, 1979), a self-report instrument that assesses multiple dimensions of social support, such as affect, affirmation and aid, and the number of people in the network, length of relationship, and frequency of contact. No one measure appears to capture the various types of supports and resources needed for people with psychiatric disabilities to achieve their goals. Some combination of these various instruments integrated into an assessment process tailored to an individual would help identify the resource needs of the given individual.

CONCLUSION

Assessment in psychiatric rehabilitation is not instrument dominated. It requires a practitioner who is able to develop a trust-based relationship with the client. Practitioners who conduct such assessments must have good interpersonal skills (e.g., the ability to demonstrate understanding). The practitioner must be skilled in involving

clients in a psychiatric rehabilitation assessment process that the clients themselves understand.

Most existing instruments lack many of the characteristics that would make the instrument most useful for psychiatric rehabilitation assessment. Although increasing numbers of psychiatric assessment instruments are focusing on skill and resource assessments as opposed to a symptom and pathological focus, these instruments are still limited in their clinical application. The most obvious limitation is their lack of environmental specificity. Existing instruments, because of their need to be standardized, provide information relevant to general environments rather than specific environments (e.g., a general work setting rather than a specific job site). To be used effectively, any assessment instrument must be integrated into the broader context of psychiatric rehabilitation, a process and partnership that is driven by the client's goal.

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