Assessment of Depression

Jacqueline B. Persons
Center for Cognitive Therapy
Oakland, CA
&
David M. Fresco
University of North Carolina
Chapel Hill, NC

A chapter to appear in M. Hersen & A. S. Bellack (Eds.) Behavioral assessment: A practical handbook (4th ed.). New York: Pergamon Press.

This chapter describes strategies for assessing depression. We focus on the assessment needs of the clinician who is utilizing cognitive-behavioral theories to guide his/her thinking and treatment. We present a theory-driven approach, where assessment decisions are dictated by the clinician's nomothetic and idiographic theories about the case. After discussing some conceptual issues, we review the most important nomothetic diathesis-stress theories of depression and we describe the measures currently available to measure the constructs of those theories. We also describe methods for obtaining a diagnosis. We conclude with a case presentation that illustrates the use of some of the methods we describe.

Making Assessment Decisions

The term "depression" can refer to a mood state, a set of symptoms, or a syndrome. Each of these terms has been defined in many ways (see Rehm (1988) for a good discussion of this point). The heterogeneity of symptoms seen in depressed patients also stems from the high rates of psychiatric, medical, and psychosocial comorbidity seen in these patients.

Because of this heterogeneity, dozens of measures have been developed for assessing the various aspects of depression. As a result, the assessor cannot simply administer a comprehensive battery; s/he must make choices. These choices are best guided by the purpose of the assessment (Hayes, Nelson, & Jarrett, 1987). In particular, the assessment procedures undertaken depend on the hypothesis being tested.

In the treatment setting, the hypothesis being tested is essentially, "Treatment interventions X, Y, and Z will be effective in alleviating this individual's depressive symptoms." Thus, the therapist is functioning as a scientist, using a hypothesis-testing approach, even when treating a single case (cf. Barlow, Hayes, & Nelson, 1984).

The results of the assessment assist the clinician in making treatment decisions. At the same time, the types of assessments carried out are often a function of the treatment the clinician expects to carry out--or at least theoretical model underpinning the clinician's thinking about treatment. Thus, assessment and treatment are intertwined.

The treatment plan is often based on the clinician's hypothesis about the nature of the mechanisms causing and/or maintaining the patient's depressive symptoms. This hypothesis, stated idiographically, is the case conceptualization, or case formulation. The idiographic formulation is generally derived from a nomothetic theory.

Idiographic versus Nomothetic Assessment

The term "nomothetic" derives from the Greek word nomos, which means "law," and the term "idiographic" derives from the Greek word idios, which means "one's own, private" (Cone, 1986). Thus, nomothetic assessment refers to the search for general laws that are applicable to large numbers of subjects, and idiographic assessment refers to the search for idiosyncratic aspects of a specific person.

The cognitive-behavior (CB) therapist uses both nomothetic and idiographic assessment measures. The CB therapist uses a nomothetic theory (e.g., hopelessness theory or Beck's cognitive theory) to provide a general framework for an idiographic conceptualization of the particular case at hand. Certain widely-used nomothetic categories and measures like the DSM-IV and the Beck Depression Inventory (BDI) provide a useful point of contact with the literature and other clinicians.

However, the treatment process, and CB treatment in particular, requires assessment of the idiosyncratic aspects of the patient's depression. What particular symptoms does this depressed patient experience? As one of our patients (Mr. Smith) recently pointed out, the BDI does not do a good job of assessing his depression because when he's depressed he eats more and sleeps more; these symptoms do not appear on the BDI. Another type of interplay between nomothetic and idiographic arises from the fact that an idiographic assessment of a particular patient's depression might involve use of a nomothetic instrument that assesses a

particular component (e.g., behavioral passivity) of depressive symptomatology that particularly captures a particular patient's depression.

Because assessment choices are guided by the clinician's nomothetic theories, we begin with a brief description of current cognitive-behavioral (CB) theories of depression.

Diathesis-Stress Theories of Depression

Within the cognitive-behavioral tradition, several diathesis-stress theories have been offered. These theories stand together conceptually by proposing that an individual's risk for depression stems from the events that occur in his/her life. Through their experiences, individuals acquire a vulnerability to depression *(the diathesis)* that can be activated in the presence of new life stress. We describe briefly three diathesis-stress theories.

Beck's Theory of Depression

Beck's (1967; 1976) Cognitive Theory of Depression proposes that individuals who have negative and distorted views of the self, world, and future are at increased risk for depression when life stress occurs. Beck (1967; 1976) views this "negative cognitive triad" as dysfunctional attitudes or schema—organized, enduring representations of knowledge and experience, generally formed in childhood, that guide the processing of current situational information.

Beck (1983) expands his cognitive theory by identifying two dispositional/personality variables, *Sociotropy* and *Autonomy*, that serve as diatheses for depression when life stress occurs. *Sociotropy* is defined as a set of beliefs, attitudes and concerns located in the individual's interpersonal and emotional domain. These individuals are at risk for depression when they face stressful interpersonal events such as a failed romantic relationship (Fresco, Craighead, & Koons, 1994b; Hammen, Ellicott, & Gitlin, 1992; Robins, 1990). Beck (1983) states that the sociotropic individual tends to experience specific depressive symptoms, including sadness, loneliness, anxious depressive symptoms, crying, and labile mood. *Autonomy* refers to a set of beliefs, attitudes and concerns for one's self-investment and achievement. Highly autonomous individuals are at risk for depression when they face stressful achievement events such as losing a job. Beck (1983) predicts that the autonomous depressed patient experiences certain specific symptoms, including unremitting anhedonia that is independent of good and bad events, inhibited crying, avoidance of others to maintain autonomy, and rejection of help from others. While studies have shown that autonomous individuals experience more achievement events than non-autonomous subjects (Robins 1990), no study has demonstrated an interaction of autonomy and achievement events either prospectively (Fresco, et al., 1994b; Robins & Block, 1988; Robins, Hayes, Block, & Kramer, 1995) or cross-sectionally (Robins, 1990). Studies of Beck's (1983) symptom specificity hypothesis have enjoyed mixed success (Persons, Burns, Perloff, & Miranda, 1993; Persons, Miranda, & Perloff, 1991; Robins, et al., 1995). Many of the negative findings have prompted researchers to refine the assessment devices (Clark & Beck, 1991; Robins & Luten, 1991). We describe the various assessment techniques below.

Helplessness/Hopelessness Theories

In Seligman's (1975) Learned Helplessness Theory and its two major revisions, the Reformulated Learned Helplessness Theory (RLH; Abramson, Seligman, & Teasdale, 1978) and the Hopelessness Theory of Depression (HT; Abramson, Metalsky, & Alloy, 1989), individuals acquire a vulnerability to depression following uncontrollable (Seligman, 1975) or negative life events (Abramson et al., 1978; 1989).

Abramson et al. (1978) incorporated aspects of attribution theory to define the diathesis for depression as an internal, stable, and global attributional style for negative events. The internal-external dimension refers to whether outcomes are attributed to the self or to factors outside the self and was used to explain changes in self-esteem. According to the theory,

depressives who attribute the occurrence of bad events internally and good events externally experience a drop in self-esteem. The stability of attributions relates to perceptions that the causes of events are recurrent or long-lived. Attributing outcomes to stable causes leads to an expectation that the causes will be present again in the future. This dimension accounts for the chronicity of the depression. Global attributions involve the belief that causes of a particular outcome occur in many areas of one's life rather than being limited to the specific circumstances surrounding the event.

Empirical tests of RLH demonstrate generally positive findings (Robins, 1988; Sweeney, Anderson, & Bailey, 1986). However, criticisms have surfaced—questioning whether attributional style is specific to depression (Hollon, Kendall, & Lumry, 1986) and whether it is a trait-like, dispositional variable (Barnett & Gotlib, 1988; Coyne & Gotlib, 1983).

The revisions presented by Abramson et al. (1989) in their Hopelessness Theory require changes to the measurement of the cognitive diathesis. Abramson et al. (1989) retain the attributional dimensions of stability and globality and introduce two additional dimensions: the inferred consequences that negative events have for the sense of self and sense for the future. We discuss several approaches to the assessment of attributional style below.

Lewinsohn's Behavioral Model of Depression

The model of depression that remains most closely tied to traditional learning theory has been offered by Lewinsohn (1974a; 1974b). At the heart of Lewinsohn's model is the observation that depressed individuals lack or have lost the ability to obtain positive reinforcers. Lewinsohn (1974b) notes that the amount of positive reinforcement in one's life results from: 1) the number and range of stimuli that a person find reinforcing; 2) the availability of reinforcers; and 3) the individual's skill (especially social skills) in obtaining reinforcers. Life events and stressors can lead to changes in any of these factors. Until individuals again learn to obtain positive reinforcement, they will be inactive, withdrawn, and dysphoric.

Two lines of evidence support the relationship between social skills and depression. First, Lewinsohn, Sullivan and Grosscup (1980) have shown that both depressed and non-depressed individuals who acquired new social skills experienced fewer bad events and more good events--and also experienced improvements in mood. Similarly, several researchers have shown that depressed individuals are less successful in social interactions than non-depressed controls (Gotlib & Robinson, 1982; Youngren & Lewinsohn, 1980) and may even possess an aversive behavioral style that initially elicits support but ultimately leads to rejection (Coyne, 1976a; 1976b; Joiner, Alfano, & Metalsky, 1992).

From Nomothetic to Idiographic

The diathesis-stress framework provides the scientist-practitioner with a compelling, empirically-validated approach to understanding depression. All of the theories described above identify a skills deficit or cognitive vulnerability that makes individuals prone to depressive symptoms when life stress occurs. These vulnerabilities have their origins in the individual's learning history. The diathesis-stress theories have led directly to the development of cognitive and behavioral interventions which have been shown to reduce depressive symptoms (cf. AHCPR, 1993) and which may reduce the risk of future depression (DeRubeis, Evans, Hollon, Garvey, Grove, & Tuason, 1990).

Therefore, we use the diathesis-stress framework to outline a strategy for assessing depression. To translate the general nomothetic model into an idiographic case conceptualization, the CB therapist must assess the specific life events which activate this individual's particular diatheses to produce the particular set of depressive symptoms the patient is experiencing, as well as information about the particular early experiences that contributed to the formation of the diatheses.

Assessment for Treatment Purposes

Because the CB therapist is using a diathesis-stress model, s/he needs methods for assessing the patient's depressive symptoms, the cognitive or behavioral diatheses, the current life events that appear to activate the diatheses, and the past life events that are likely to have caused the diathesis. We review measures for assessing these constructs below.

We also review methods for obtaining a diagnosis for depressed patients. Although cognitive-behavioral theories are not stated in diagnostic terms, use of standard psychiatric nomenclature facilitates communication between patient and clinician, between patients and their families, among clinicians, with insurance companies, and provides a point of contact with the research literature.

We do not extensively review assessment of many other constructs and phenomena frequently seen in depressed patients and useful to know about in order to make an adequate treatment plan. Depressed patients frequently have many other difficulties and disorders, including psychiatric disorders (such as substance abuse, anxiety disorders, and personality disorders), medical problems (such as diabetes, hypertension, obesity, and AIDS), and psychosocial problems (such as interpersonal problems, work difficulties, financial stresses, and legal difficulties).

From a diathesis-stress perspective, a depressed patients' co-existing symptoms and problems may play the role of activating life events or stresses. For example, untreated panic and agoraphobia may lead to social isolation and a reduction in interpersonal reinforcers, which may lead in turn to depression. Sometimes causal arrows (cf. Haynes, 1992; Haynes & O'Brien, 1990) appear to go in both directions. For example, depressive symptoms may lead to poor self-care, which may lead to complications due to diabetes, which may lead to losses of functioning, reductions in reinforcers, and depression. For another example, a wife's depressive symptoms wife may contribute to communication difficulties with her husband; as a result, he withdraws, exacerbating her depressive symptoms. Medical problems and/or the medications used to treat them may lead to depressive symptoms via biological and/or psychological routes.

To obtain a useful conceptualization of the case and to make an adequate treatment plan for any depressed patient, we recommend a comprehensive assessment of co-existing psychiatric, medical, and psychosocial difficulties (Nezu & Nezu, 1993; Persons, 1989, 1992; Turkat, 1985). Effective treatment also requires assessment of the patient's strengths and resources (Evans, 1993; Surber, 1994). Although quite important, particularly to the cognitive-behavior therapist, we also do not discuss the assessment of treatment goals (Kiresuk & Sherman, 1968; Mintz & Kiesler, 1982). We also do not discuss the assessment of suicidality, which has been discussed in detail elsewhere (e.g., see Linehan, 1981).

In addition to assessing multiple domains, assessment across multiple time periods is also needed. Treatment is a hypothesis-testing process that is constantly evaluated by on-going assessment (cf. Barlow et al., 1984). The initial treatment plan is determined by the therapist's hypothesis about the mechanisms that cause and maintain the presenting symptoms. Ongoing assessment of progress provides data that are useful in evaluating the utility of the formulation (AHCPR, 1993; Kazdin, 1993). Lack of treatment progress suggests that the formulation needs revision. Thus, many of the measures described below are intended for repeated assessment of overall symptoms and of progress toward accomplishing treatment goals.

Diagnosis

The structured clinical interview provides the scientist-practitioner with a reliable and valid means to assess the lifetime and current diagnostic histories of patients as well as the presence and severity of symptoms. In this section, we briefly describe the features and merits

of two structured diagnostic interviews the Structured Clinical Interview for DSM-IV (SCID; First, Spitzer, Gibbon, & Williams, 1995), and the Anxiety Disorders Interview Schedule for DSM-IV (ADIS-IV; Brown, Di Nardo, & Barlow, 1994). While the ADIS has been designed primarily for the anxiety disorders, it has sections to assess the diagnostic categories and symptoms that most commonly co-occur with the anxiety—notably the depressive disorders.

The SCID (First, et al., 1995) is the instrument that is most suited to the clinician who needs to confirm the presence of a DSM-IV diagnosis or resolve issues of a differential diagnosis. The research version of the Axis I SCID takes between 60 and 90 minutes to administer. However, the SCID for DSM-IV now includes a clinician version (SCID-CV) that is a shortened version of the full DSM-IV SCID (First et al., 1995). It differs from the research version by excluding probes about diagnostic subtypes and other specifiers. While the SCID for DSM-IV is relatively new, previous versions of the SCID have enjoyed impressive reliability and validity (Spitzer, Williams, Gibbon, & First, 1992).

The SCID was fashioned after the traditional interview in which clinicians probed their clients in a manner that allowed for several diagnostic hypotheses to be considered and tested simultaneously. Each section begins with a YES/NO probe followed by queries that ask for elaborations. If the probe is not answered with a YES, the interviewer skips to the following section. If the screen is met, the interviewer continues in the section until a diagnosis is earned or until a criterial item does not meet clinical significance. This strategy has two main advantages: 1) diagnostic decisions are known to the interviewer during the interview, and 2) interviews are shorter, because irrelevant sections are not exhaustively probed. However, the SCID may not be the most effective method of assessing symptom levels over time or over the course of a therapy Self-report measures of depressive symptoms, such as the Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979) represent a useful compliment to the SCID when a clinician needs understand the diagnostic history at intake—yet needs a repeated measure of syndromal depression over the course of psychotherapy.

The SCID is the successor to two other well-known approaches to diagnostic assessment, the Schedule for Affective Disorders and Schizophrenia (SADS; Endicott & Spitzer, 1978), and the NIMH Diagnostic Interview Schedule (DIS; Robins, Helzer, Croughan, & Ratcliff, 1981). Neither the SADS nor the DIS have been updated for DSM-IV criteria. Further, both of these interviews share a logical strategy (Spitzer et al., 1992) to arrive at a diagnosis that makes them less useful to the clinician. For both interviews, all diagnostic decisions are made by hand or by computer after all interview data are collected. Thus, interviews can become lengthy since all items are asked, and interviewers are discouraged from obtaining additional information for fear of violating the standardized administration of the instrument. For these reasons, the SCID remains the structured interview that best serves the scientist-practitioner in need of assessing the presence of DSM-IV diagnoses.

The ADIS-IV (Di Nardo et al., 1994) is another structured interview, updated for DSM-IV that permits the clinician to make differential diagnoses of the Axis I disorders (e.g., unipolar & bipolar depression, somatoform disorders, and substance use disorders) that commonly co-occur with anxiety, as well as Mixed Anxiety-Depressive Disorder. Similar to the SCID, the ADIS takes roughly the same amount of time to administer. Many sections of the ADIS end with optional research-oriented probes that can be omitted to make the ADIS a briefer interview.

Perhaps the greatest advantage of the ADIS-IV for the clinician (over the SCID), is the inclusion of probes for assessing impairment, as well as the client's strengths. In addition, the ADIS-IV includes probes for assessing etiological factors and situational antecedents in each diagnostic session. The ADIS-IV-L includes sections for probing about the lifetime diagnostic histories of anxiety, affective, somatoform, and substance use disorders (ADIS-IV-L; Di Nardo, Brown, & Barlow, 1994). Additionally, the ADIS-IV-L adopts a "Diagnostic Timeline" approach to assist the clinician in tracking the onset, remission, and temporal ordering of

diagnoses. While the ADIS-IV and ADIS-IV-L are relatively new, their predecessors have demonstrated strong reliability (Di Nardo, et al., 1993).

In sum, we recommend two structured diagnostic interviews to the scientist-practitioner: the SCID for DSM-IV and the ADIS-IV. As we state above, diagnostic assessment is not central to the diathesis-stress model. However, it is useful to the clinician when communicating with other clinicians, with insurance companies, with patients and the patients' families. Perhaps most important, diagnostic information allows the clinician to make use of and to contribute to the research literature which (for better or worse) is frequently organized around the diagnostic nomenclature.

Overall symptoms of depression

Several nomothetic self-report instruments assess the presence and severity of a broad range of depressive symptoms. Clinician-rated measures have also been developed for assessing depressive symptoms, most notably the Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960). We focus on self-report measures because they are most useful to the clinician, particularly when repeated assessments are conducted.

The Beck Depression Inventory

Initially developed as a clinician's rating scale (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), the Beck Depression Inventory (BDI) was revised in 1971 for use as a self-report instrument and has become one of the most widely used measures of depression in both psychiatric (Piotrowski, Sherry, & Keller, 1985) and non-psychiatric populations (Steer, Beck, & Garrison, 1986). In its self-report form, the BDI (Beck, Rush, Shaw, & Emery, 1979) is a 21-item instrument that broadly assesses the symptoms of depression including the affective, cognitive, behavioral, somatic, and motivational components as well as suicidal wishes. Notably absent from the BDI are items that measure psychomotor agitation, increased appetite, and hypersomnia—all included as symptoms of depression in the DSM-IV.

The patient's scores on each item of the BDI are generally summed to provide an overall index of depression that can be compared to cut-off scores. Recently, Beck, Steer, and Garbin (1988) conducted a meta-analytic study of the BDI and reported the mean coefficient alpha across 25 years of psychiatric studies to be 0.86 in studies of psychiatric populations. The criterion validity across studies that also administered the HRSD was also high ($\underline{r}$= 0.73 in psychiatric samples), as were correlations with other criterion measures of depression such as the Zung (1965), MMPI-D, and MAACL-D (Zuckerman & Lubin, 1965). Beck and Beck (1972) developed a 13-item version of the BDI that has demonstrated a strong correlation with its longer predecessor ($\underline{r}$=0.96).

Other Measures

The Center for Epidemiological Studies' Depression Scale (CES-D; Radloff, 1977) resembles the BDI by inquiring about the frequency and severity of 20 depressive symptoms. The CES-D has been used extensively to assess community samples (Boyd, Weissman, Thompson, & Myers, 1982; Roberts & Vernon, 1983), ethnic minorities (Cho, Moscicki, Narrow, & Rae, 1993), the elderly (Mahard, 1988; Orme, Reis, & Herz, 1986), and adolescents (Garrison, Addy, Jackson, & McKeown, 1991). CES-D items tend to measure the affective component of the depressive syndrome more heavily than the other symptom areas (Rehm, 1988).

The MMPI-D scale (Hathaway & McKinley, 1951) represents 60 items from the larger Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1942). As with the other items of the MMPI, the D scale contains obvious (face-valid) items as well subtle items (e.g., 'I enjoy playing drop the handkerchief.') that are used because they contribute to a scale score that discriminates depressed subjects from non-depressed subjects. The MMPI and the MMPI-D are supported by extensive reliability and validity data. However, the MMPI-D is less useful to the clinician than other similar measures because of its use of non-face-valid items.

Idiographic measurement of depressive symptoms

Different individuals have different symptoms of depression. As a result, nomothetic measures do not always provide a sensitive measure of a particular patient's depressive symptoms. Sometimes, as in the case of Mr. Smith, the patient described earlier who sleeps and eats more when he is depressed, a useful idiographic measure can be created by simply modifying a nomothetic measure like the Beck Depression Inventory. In Mr. Smith's case, items could be added to the BDI to assess increased sleep and eating, and the insomnia and anorexia items could be deleted. Although the score on Mr. Smith's individualized BDI does not permit between-subject comparisons, it does provide a useful measure for assessing Mr. Smith's progress in treatment.

Another idiographic strategy for assessing depressive symptoms is to use measures of one or two of the components of depressive symptomatology (mood, cognitions, behaviors, or somatic symptoms) that are particularly prominent or meaningful for the patient in question, as described next.

Specific Components of Depressive Symptomatology

Cognitive-behavior therapists commonly view depression as composed of three primary components (mood, behavior, and cognitions) and sometimes a fourth (somatic symptoms). We describe methods for assessing mood, behavior, and cognitions.

Mood

The Multiple Affect Adjective Checklist (MAACL; Zuckerman & Lubin, 1965) is a self-report measure that asks respondents to endorse adjectives describing their present mood state. The MAACL consists of 132 adjectives yielding three negative affect scales: depression (40 adjectives), anxiety (21 adjectives), and hostility (28 adjectives) plus 39 neutral filler adjectives. The three scales are comprised of both positive and negative affect words. Scores are computed by summing the number of negative adjectives endorsed (e.g., alone, blue, hopeless, suffering) with the number of positive adjectives not endorsed (e.g., active, alive, enthusiastic). That is, a mood state consists of the presence of negative affect plus the absence of positive affect. Recently, the MAACL underwent revision to re-standardize the items and to add two new scales: positive affect and sensation seeking (MAACL-R, Zuckerman, Lubin, & Rinck, 1983). In either form, the MAACL is an easily-administered, quick means of assessing affect.

The Positive Affect and Negative Affect Scales (PANAS; Watson, Clark, & Tellegen, 1988b) is another self-report measure of current mood. Adjectives assess both positive affect (e.g., interested, alert, strong) and negative affect (e.g., distressed, upset, irritable, nervous). Unlike the MAACL, positive affect (PA) and negative affect (NA) are treated as orthogonal, unipolar scales that cut across the syndromes of depression and anxiety (Watson, Clark, & Carey, 1988). The PANAS has also been shown to be a useful measure across time. Watson (1988) has shown that changes in NA predict changes in physical complaints and perceived stress while changes in PA predict changes in social activity and response initiation.

The Visual Analogue Scale (VAS; Aitken, 1969) is a useful measure of mood in clinical practice because it is easy to administer and can be adapted idiographically to any mood state. This approach allows for the assessment of idiosyncratic states that may have special meaning for a patient (e.g., emptiness, fogginess, boredom). The VAS asks the question, "How is your mood right now?" Subjects respond by making a mark on a 100-mm line with anchors at the left ("worst") and right ("best"). The score is the distance in millimeters from the left of the line. An adaptation of the VAS substitutes a 100-item or 10-item scale on which the patient verbally reports the intensity of his/her mood state. A scale like this can be useful for assessing mood state within the session, on a daily or weekly basis, or for assessing mood shifts during a

therapy session (cf. Persons & Burns, 1985; see its use on the Daily Record of Dysfunctional Thoughts in Beck, Rush, Shaw, & Emery, 1979).

Behaviors

With its origins in the single-subject design paradigm from both experimental (Ferster & Skinner, 1957) and clinical settings (Wilson & O'Leary, 1980) and its emphasis on observable events and situational determinants of behavior, the idiographic assessment of behavior has a strong historical foundation.

Self-monitoring is a hallmark technique that emerged from traditional behavioral assessment. Kazdin (1974) describes self-monitoring as the process of observing and recording one's own overt and covert behaviors. Teaching a client to collect data on her/his behavior can be useful when defining the client's problems, changing the frequency of desired or undesired behaviors, and evaluating the progress of therapy. Thoresen and Mahoney (1974) describe self-monitoring as occurring in five steps: discrimination of a response, recording of a response, charting of a response, displaying of data, and analysis of data. While we introduce the technique of self-monitoring in this section on the behavioral component of depression, the technique can be easily adapted for the assessment of other parts of the depressive syndrome. Linehan (1993) has blended aspects of Zen meditation and self-monitoring into a powerful and comprehensive technique that she calls "mindfulness." Clients who master Linehan's (1993) mindfulness techniques can gain a better understanding of the interplay between mood, cognition, and behavior.

Idiographic assessment of the depressed patient's activities, which are often sparse and unsatisfying, can be done with the Weekly Activity Schedule, presented in Beck et al. (1979, p. 122). The Activity Schedule is a sheet of paper divided into one-hour blocks beginning at 9 a.m. and ending at midnight, with a separate column for each day of the week. Beck et al. (1979) recommend that depressed patients complete an activity schedule describing their use of time, on an hour-by-hour basis, between the first and second therapy sessions of the standardized cognitive therapy for depression protocol described in Beck et al. (1979). Although an hour-by-hour catalog is not always necessary, certainly the Activity Schedule does provide the clinician with a useful measure of the patient's activities.

The Pleasant Events Schedule (PES), developed by Lewinsohn and published in Lewinsohn, Muñoz, Youngren, and Zeiss (1978), is a nomothetic measure of behavior. The PES is a 320-item self-report scale listing pleasant events. For each event, the patient is asked to rate the frequency and the pleasantness of the event on a 0 to 2 scale. The PES provides useful information about the depressed patient's behaviors and leads to obvious intervention suggestions.

Other behavioral measures can also be useful in treatment planning for a depressed patient. For some patients, as Lewinsohn's model emphasizes, a measure of social skills is needed (see the Hope and Meier chapter, this volume). Role-play strategies can be useful in assessing assertiveness and other interpersonal difficulties. As Kohlenberg and Tsai (1991) and many others point out, observation of the patient's interactions with the therapist provides important in vivo assessments of interpersonal difficulties that probably occur outside the therapy session as well.

Cognitions

Automatic thoughts, or the "stream of consciousness" self-statements made by depressed individuals, are believed to play a role in the onset (Abramson et al., 1989) and maintenance (Beck, 1976; Beck, et al., 1979) of depression. They covary with the presence or absence of depressive mood (Hollon, et al., 1986) and offer the clinician a rich source of information (Beck, et al., 1979).

The Automatic Thoughts Questionnaire-Negative (ATQ-N; Hollon & Kendall, 1980) is a

30-item self-report instrument designed to measure the frequency of negative self-statements described in Beck's (1967; 1976) theory of depression. Items such as 'I'm no good,' 'Why can't I ever succeed,' and 'I've let people down.' represent the negative thoughts about the self that Beck (1967; 1976) describes as part of the cognitive triad. The ATQ-N has demonstrated excellent psychometric properties, specificity to depression, and sensitivity to changes in mood state (Dobson & Breiter, 1983; Hill, Oei, & Hill, 1989; Hollon & Kendall, 1980; Hollon, et al., 1986).

Ingram and Wisnicki (1988) developed the Automatic Thoughts Questionnaire-Positive (ATQ-P), a 30-item questionnaire that inquires about the frequency of positive automatic thoughts such as 'I am respected by my peers,' 'I'm proud of my accomplishments,' and 'My life is running smoothly.' The ATQ-P enjoys excellent psychometric properties (α =.94) and has been successful in discriminating between depressed and non-depressed subjects (Burgess & Haaga, 1994; Ingram et al., 1990).

Below, we describe several "in-session" techniques to assess negative self-statements. However, these techniques assume that clients have access to their automatic thoughts and can reliably report them. For the client who is not practiced in identifying self-statements, measures such as the ATQ can to help clients obtain information about the content and number of their automatic thoughts. Repeated administration of the ATQ can serve as a useful measure of treatment progress.

A useful first strategy in the idiographic assessment of cognitions is the simple counting of negative thoughts or thoughts that follow a particular theme. Burns (1980) suggests using a golf stroke counter for this purpose. To test the hypothesis that her concerns followed a theme of feeling unsupported and alone, one of our patients recently kept a log of thoughts that followed that theme. A count of negative thoughts can serve as a useful marker of treatment progress. A count of suicidal thoughts or another type of thought--e.g., recurrent thoughts about a medical problem--can also be clinically useful.

The Thought Record (see Figure 1), described in Persons (1989) provides an idiographic method for assessing automatic thoughts that leads directly to intervention in the therapy session. The columns of the Thought Record are: Situation, Emotion, Behavior, Thoughts, and Responses. The Thought Record thus captures the key features of the diathesis-stress model: situation, cognitions, and emotional reaction. The Thought Record is based on and includes all key features of the Daily Record of Dysfunctional Thoughts published in Beck et al. (1979); it differs from the Daily Record of Dysfunctional Thoughts in that it has a column for behavior, which makes it possible to show how cognitions, mood, and behavior are related. Patients can be asked to record, over the course of a week, a Thought Record for one or two or more problematic situations. A review of several records often reveals repeated themes that appear across situational variations and point to underlying diatheses.

Insert Figure 1 about here

Specialized cognitive measures like Beck's Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974) and Linehan's Reasons for Living Scale (published in Corcoran & Fischer, 1987) can also be quite useful clinically. Beck, Steer, Kovacs and Garrison (1985) reported, in a study of 207 suicidal patients, that the Hopelessness Scale was a strong predictor of completed suicides. Certainly cognitions about suicide rate high priority and can be assessed with Beck's Scale for Suicide Ideation (Beck, Kovacs, & Weissman, 1979).

The Diathesis

Assessing the diathesis is important for several reasons. According to the diathesis-stress theories, patients remain vulnerable to depression relapse when treatments address only

overt symptoms and problems while overlooking the underlying diathesis. Consequently, these patients tend to experience new bouts of depression following events that re-activate their diathesis. In addition, Persons (1989) argues that information about the diathesis helps the therapist set good treatment goals, choose helpful interventions, manage homework, minimize noncompliance, and bolster the patient-therapist relationship.

We describe both nomothetic and idiographic assessment techniques that measure the diatheses described in Beck's (1967, 1976; 1983) Theory and Helplessness Theory (Abramson et al., 1978; 1989).

Beck's Theory

The Dysfunctional Attitude Scale (DAS; Weissman & Beck, 1978) consists of two 40-item, factor-analytically derived questionnaires that tap into the depressed person's unrealistic, distorted and illogical beliefs about the self, world, and future. Form A of the DAS is the more widely used of the two measures. Weissman and Beck (1978) report excellent internal consistencies ($\alpha \geq .90$) across several samples. Two criticisms of the DAS have been raised. First, Hollon, et al. (1986) reported that DAS scores were elevated in non-depressed psychiatric populations (such as schizophrenic patients and those with bipolar illness), suggesting that these cognitions are not specific to unipolar depression. Second, many studies have found that DAS scores of remitted depressed subjects were not different from a nonpsychiatric control group—suggesting that dysfunctional attitudes are mood-state dependent rather than a stable mode of perceiving the world. Two separate explanations that account for these findings have been offered by Alloy, Albright, Fresco, and Whitehouse (1995) and Persons and Miranda (1992). Alloy et al. (1992) point out that many of the studies showing instability of cognitive style scores used psychiatric samples who received treatment or employed a cross-sectional design that makes direction of causality difficult to determine. Alternatively, Persons and Miranda (1992) proposed the mood-state hypothesis to account for them. The mood-state hypothesis states that the beliefs are stable in vulnerable individuals, but they are accessible only during negative mood states.

Weissman and Beck (1978) designed the DAS to broadly cover the dysfunctional attitudes held by depressed individuals described by Beck's (1967; 1976) Cognitive Theory of Depression. However, other researchers have successfully identified scales labeled *Approval by Others* and *Performance Evaluation* that correspond to Beck's (1983) cognitive/personality constructs of sociotropy and autonomy (Cane, Olinger, Gotlib, & Kuiper, 1986; Rude & Burnham, 1993).

The Sociotropy-Autonomy Scale (SAS; Beck, Epstein, Harrison, & Emery, 1983), a 60-item self-report measure, is the first instrument designed specifically to measure the interpersonal and achievement concerns of depressed subjects based on Beck's (1983) theory. Across many studies, both scales have demonstrated strong internal consistencies (Sociotropy, $.82 \leq \alpha \leq .93$; Autonomy, $.80 \leq \alpha \leq .88$), yet weak autonomy findings have prompted researchers to undertake revisions of the SAS (Clark & Beck, 1991; Robins & Luten, 1991).

Robins, Ladd, Welkowitz, Blaney, Diaz, and Kutcher (1993) reworked and dropped items from the original SAS to produce the Personal Style Inventory II, a 48-item self-report measure with two internally consistent scales (Sociotropy, $\alpha = .88$; Autonomy, $\alpha = .86$) that are relatively orthogonal ($r = .18$).

The Clark and Beck (1991) revision of the SAS involved adding to and reworking of the original 60 items to produce a scale of 74 items. The Sociotropy Scale remains relatively unchanged. In the validation study of the revised SAS, the Sociotropy Scale served as a predictor of both levels of depression and levels of anxiety. The Autonomy Scale ($\alpha = .87$) has been re-labeled Solitude/Interpersonal Insensitivity to reflect the content of its items. In the same validation study, this new Solitude Factor served as a strong predictor of levels of depression, but not anxiety. Two additional factors emerged from the remaining Autonomy

items. Clark and Beck (1991) call these factors *Independence* and *Individualistic Achievement*—-neither of the new scales demonstrated any relationship to depressive or anxious symptoms.

Helplessness Theory

The Attributional Style Questionnaire (ASQ: Peterson, Semmel, von Baeyer, Abramson, Metalsky, & Seligman, 1982; Seligman, Abramson, Semmel, & von Baeyer, 1979) is a self-report inventory that assesses attributions for six positive and six negative hypothetical events along the dimensions of internality, stability, and globality. The twelve events can be further divided into categories of achievement and interpersonal. Subjects respond by reporting the major cause for each hypothetical event and then rating the causes along the attributional dimensions. Positive and negative event composite scores can then be derived by summing across the internality, stability and globality dimensions for the six positive and six negative events separately. Each dimension is scored on a one to seven Likert-type scale with the higher end representing a response endorsing internal, global or stable causes and the lower end representing external, specific and unstable causes. Generally, a Composite Negative (CN) score is computed by summing the values of the 18 internal, stable and global items for the negative events. A similar Composite Positive (CP) score from the positive hypothetical event items is also computed. Alloy, Kayne, Romer, and Crocker (1995) have found modest internal consistencies for the individual dimensions but the composite scores have a more respectable Chronbach alpha score (α =.83 for CP; α =.84 for CN). Similarly, test-retest correlations with an interval of four weeks were good: r=.81 for the positive event composite score and r=.73 for the negative event composite score.

Despite robust positive findings, especially between CN and depression (Sweeney, Anderson, & Bailey, 1986), critics of the cognitive diathesis-stress theories suggest that negative attributional style is neither specific to depression nor stable over time (Barnett & Gotlib, 1988; Coyne & Gotlib, 1983; Hollon, et al., 1986). In an effort to improve measurement of attributional style and to acknowledge theoretical uncertainty about attributional style for good events, Peterson and Villanova (1988) dropped the six hypothetical good events and added eighteen hypothetical bad events to produce a broader, more internally consistent measure of negative attributional style. Similarly, Metalsky (Abramson & Metalsky, 1986; Metalsky, Halberstadt, & Abramson, 1987) has undertaken revisions to the original ASQ to produce a more reliable measure of attributional style and to include revisions based on Hopelessness Theory (HT; Abramson et al., 1989). As noted above, HT identifies three separate diathesis related to the attributions and inferences that individuals make about negative events in their lives: the *attributional (or generality) diathesis* (e.g., stable and global attributions for negative events); the *self diathesis* (e.g., a generalized tendency to make negative inferences about the self when negative events occur); and the *consequences diathesis* (e.g., a generalized tendency to make negative inferences about the future when negative events occur). Metalsky and Joiner (1992) provide initial psychometric and empirical support for all three scales by demonstrating diathesis-stress interactions between negative life events and generality (α =.87), self (α =.91), and consequences (α =.89) to predict depression, but not anxiety.

While the ASQ provides a quick means of assessing attributional style, obtaining a completed self-report measure represents an obstacle in some settings. Consequently, Peterson and Seligman (Peterson, 1992; Peterson, Schulman, Castellon, & Seligman, 1992; Peterson & Seligman, 1984) developed a technique for assessing individuals' spontaneous attributions about *real life good and bad events*. The Content Analysis of Verbatim Explanation (CAVE) extracts event statements and attributions from verbatim passages and rates the extracted material for internality, stability and globality. While the efficacy of the CAVE technique has been demonstrated in depressed patients (Peterson, Luborsky, & Seligman, 1983; Peterson & Seligman, 1984), some questions remain about the relationship between attributional style scores obtained with the ASQ and the CAVE (Fresco, Craighead, & Koons, 1994a; Peterson, Bettes, & Seligman, 1985; Schulman, Castellon, & Seligman, 1989). Efforts are underway to adapt the CAVE technique for use as a clinical assessment tool (Fresco, Craighead, Sampson,

Watt, & Koons, 1995).

Idiographic assessment of the diathesis

Idiographic assessment of patients' cognitive diatheses can be done in several ways. A frequently-repeated automatic thought, particularly if it is one about the self or others (e.g., "I can't do it") seems likely to reflect the patient's guiding schemas. The "downward arrow" technique described by David Burns (1980) can be helpful in obtaining information about schemas, or core beliefs. To use the downward arrow technique, begin with a Thought Record that lists several automatic thoughts arising in a problematic situation. Pinpoint any thought, particularly one that might be true (e.g., "If I ask her to return the money I loaned her, she might get upset and angry."). Then ask the patient, "Imagine that happened; why would that be upsetting to you?" When the patient responds, ask the question again two or three or four times, until the patient's concerns appear to "bottom out"--the patient can't think of anything worse. The last thought or two in this sort of a downward stream seems to reflect patients' central concerns and views of self, others, and future. In the case of the patient who began with the thought, "If I ask her to return the money I loaned her, she might get upset and angry" responded, the stream of thoughts following it was: "I wouldn't be able to handle it," "She'd get upset and it would be my fault," "I'd lose a friend," "I'd be alone." Thus, this patient's central view of herself seems to be that she is inept, and her view of others is that they are angry, attacking, and rejecting.

Information about core schemas can also be obtained through a review of several Thought Records that describe problematic situations and list automatic thoughts. A review of several records can often reveal a theme that occurs repeatedly and appears to have a certain cross-situational stability. Similarly, an oft-repeated automatic thought (e.g., "I can't do it") seems likely to reflect salient, important schemas.

Although the downward arrow and the "look for the theme" method of assessing schemas are probably widely used by clinicians, we are not aware of any data examining the reliability or validity of these methods of schema assessment.

Life Events

The diathesis-stress theories point to the need for assessment of two types of life events: current situations and events that seem to play a role in activating diatheses to produce symptoms, and early life events that may have played a role in causing the diatheses. Important early life events can include major acute traumas, such as deaths, incidents of physical or sexual abuse, that may have occurred only once or twice, or may include chronic, grinding kinds of events (e.g., daily criticism).

Researchers, drawing on the cognitive diathesis-stress theories, argue that individuals at risk for depression suffer from information processing biases in the way they gather information about their environments. Traditional life stress assessment (e.g., self-report scales) did not separate subjective distress ratings from measures of the hypothesized diathesis. To address this potential bias, Brown and Harris (Brown, Bifulco, Harris, & Bridge, 1986; Brown, Bifulco, & Harris, 1987; Brown & Harris, 1978; Brown, Harris, & Peto, 1973) and Monroe (Monroe, 1982a; 1982b; 1983; Monroe & Roberts, 1990; Monroe & Simons, 1991) pioneered the development of a system of structured life stress interviews. The appeal of these interview schemes is that the impact of life events can be derived by carefully probing for idiosyncratic, objective factors about particular events to see how they influence an individual's life. The protocol provides interviewers with a standard, default set of probes for each event to assist in arriving at an objective impact rating.

While learning these life stress interview protocols may not be practical for clinicians, this work provides important suggestions for adaptation to clinical settings. First, clinicians should not rely completely on the subjective distress reported by clients. Rather, clinicians should probe their clients for objective details about the events. If a client describes the event in

a way that reveals significant cognitive distortion or magnification of the impact, this provides important information for the clinician about hypothesized underlying diatheses that can become the focus of treatment.

Clinicians may find self-report inventories of life stress more useful than interview methods. Three self-report inventories of life stress, used mostly in research settings, may be useful to clinicians. The Life Experiences Survey (LES; Sarason, Johnson, & Siegel, 1978) and the Social Readjustment Rating Scale (SRRS; Holmes & Rahe, 1967) are inventories of major life events, while the Hassles and Uplifts Scales (Kanner, Coyne, Shaeffer, & Lazarus, 1981) provide a list of daily bad and good happenings. The mention of important events in clients' lives will often emerge during routine interviewing. However, some clients may benefit from a list of items, such as these self-report inventories, that prompts their recall of important events.

A Case Example

Jane was a 30-year old single white woman who worked as a supervisor for an office supply business and lived with her boyfriend. Her presenting complaint was, "I'm stressed out at work, but it's really home problems that bring me in." Depressive symptoms were a prominent feature of Jane's clinical picture and we focus on them here. We describe the assessment methods the therapist (JBP) used to develop an idiographic formulation, based on the diathesis-stress model, of Jane's case.

Depressive Symptoms

When the initial interview revealed many depressive symptoms, the therapist asked Jane to complete a Beck Depression Inventory (BDI) and bring it to the next session. On the BDI, Jane had endorsed symptoms of sadness, lack of enjoyment, feeling discouraged about the future, guilt, feeling disgusted with herself, irritability, difficulty making decisions, difficulty getting things done, feeling old and unattractive, fatigue, insomnia, loss of libido, worry about physical problems, and suicidal thoughts that Jane described as "fleeting." Her BDI score was 22.

The therapist explained to Jane that she appeared to be clinically depressed and suggested that she complete a BDI each week so that her progress in treatment could be monitored. The therapist kept a clipboard and a supply of inventories in her waiting room. Jane was asked to come to her session five minutes early so she could complete a BDI for use in the session. She was able to do this task prior to most sessions.

Behavioral Component

The initial clinical interview revealed that the most prominent component of Jane's depression was behavioral. Jane reported that she typically came home from work and collapsed on the couch--eating dinner some nights and simply snacking others--and that she did almost nothing on weekends. When this information came out in the interview, the therapist asked Jane to complete a Weekly Activity Schedule (Beck et al., 1979). It indicated that Jane routinely slept until noon on weekends, then spent hours drinking coffee while reading the paper. Her Activity Schedule showed almost no social or pleasurable activities. Information obtained from the Activity Schedule formed the basis of interventions designed to increase Jane's activity level. She was receptive to this line of work and made some immediate changes--adding some social activities and structuring her day to make her weekend mornings more productive.

Another behavioral aspect of Jane's depression was her unassertiveness. For example, Jane reported that she frequently loaned money to friends and family then felt unable to ask for its return. She also expressed difficulty in disciplining subordinates at work or refusing their requests for special accommodations. To obtain some objective measurement of Jane's assertiveness difficulties, the therapist asked her to complete the Assertion Inventory (AI; Gambrill & Richey, 1975), a 40-item scale measuring degree of discomfort with assertion and

response probability of engaging in assertive behaviors. This measure is supported by strong reliability and validity data (Corcoran & Fischer, 1987). Jane's initial scores on the AI indicated that she typically approached situations in an "unassertive" manner (as opposed to "assertive," "anxious performer," or "doesn't care").

The Thought Record (see Figure 1) provided a detailed idiographic assessment of the situational, behavioral, and cognitive components of Jane's lack of assertiveness. For example, in a typical Thought Record, Jane reported she avoided speaking assertively to a subordinate who was arriving late to work. When Jane listed the automatic thoughts that she felt inhibited her from speaking up in this situation, she reported the thoughts: "He'll be angry at me," "It will create bad morale at the office," "I don't know how to handle this situation," and "If I were a good manager, I would handle this situation so that he wouldn't get angry at me." Getting these thoughts out on the table led directly to cognitive restructuring interventions. To test out Jane's hypothesis that she didn't know how to handle the situation, the therapist initiated a role-play in which Jane demonstrated how she would speak to her subordinate (an in vivo behavioral assessment). The demonstration made it clear to both the therapist and to Jane that her interpersonal skills in this situation were excellent and that Jane's view of herself as not knowing how to handle the situation was significantly distorted.

Cognitive Diathesis

Jane completed the Dysfunctional Attitude Scale (DAS-A; Weissman & Beck, 1978) after the first session. It showed she had significant numbers of distorted beliefs and cognitions; her score was 142 (each item was scored on a 1 to 7 scale). Items reflecting distortions indicated problems in both the achievement ("If I cannot do something really well, there is little point in doing it at all") and interpersonal ("I nearly always try to avoid conflicts, arguments, or fights with my partner") domains.

Jane's core beliefs were also assessed idiographically using Thought Records and the downward arrow technique, which was illustrated above. These methods revealed a few beliefs that occurred repeatedly across many problematic situations. Jane's often expressed the beliefs "I'm inadequate, inept, and helpless," and "I am responsible for others," as well as "Others are critical and attacking, and "Others are weak and helpless."

Activating Life Events

No formal measure was used to assess activating life events. Instead, the therapist asked, in detail, for this information, during an early interview. Jane reported several events, including the recent marriage of a close friend. This event both reminded her that her own relationship was not moving ahead and activated her beliefs, "I'm inadequate, I'm helpless, I can't cope."

Although she initially stated that it was her chief concern, Jane spent surprisingly little time talking about difficulties in her romantic relationship. The therapist hypothesized that it was an in vivo example of what proved to be Jane's chronic passivity and avoidance behavior. When discussing her romantic relationship, Jane mentioned that her boyfriend was working part-time at a job that was far below his abilities. Jane ultimately expressed that, for years, she felt hopeless about the future of their relationship.

Significant Early Events

Significant early events were also assessed via the clinical interview. When assessing significant early events in an interview, we recommend asking the patient to describe specific events in detail, rather than simply providing a general overview; we have found specific event descriptions to be much more useful and informative than general descriptions.

A review of Jane's family history yielded information about the origins of her views of herself (i.e., not measuring up) and her views of others (i.e., as attacking and helpless). Jane's father was a harsh, critical, and self-centered alcoholic who was prone to irrational, angry

outbursts over minor events. For example, there were times when he would fly into a rage if Jane came home from school a few minutes early or late. Her mother was passive, weak, and helpless--avoiding confrontation whenever possible; for example, when Jane's father was attacking her, her mother was likely to scurry into the kitchen to avoid the scene. Jane had five brothers and sisters. As a child, she adopted a caretaking role in the family. For example, if one of her sibs dropped a piece of food on the floor, Jane would step forward to distract her father in hopes of preventing him from flying into a rage.

Course of Treatment

Jane's treatment was an unusually long one, due in part to the multiplicity of her difficulties, not all of which were described here. She worked in therapy for 90 sessions over 2 years. The therapist kept a graph of weekly BDI scores that proved invaluable in monitoring and making adjustments over the course of this long treatment (see Figure 2).

Insert Figure 2 about here

At the beginning of treatment, Jane made quick progress on her behavioral inactivity, beginning by scheduling events with her friends to get herself up and about in the morning on weekends; she knew that if she did this, she had a more active day. Her depressive symptoms remitted gradually (see Figure 2).

At about session 20, Jane had a major setback when she decided to break off the relationship with her boyfriend yet felt too guilty and frightened to do so. She backed off from that decision, continued working on her depression, and made some progress. For many weeks, her BDI score remained consistently, in the 10 to 15 range.

At about session 40, her BDI score jumped up again. To understand this increase, Jane and the therapist reviewed recent events and situations--searching for situations or circumstances that might have activated Jane's symptoms. Still, the reasons for this setback remained unclear. At this point, the therapist initiated a reformulation of the case and a review of the treatment plan, as Jane's progress seemed stalled, as the graph of BDI scores clearly showed.

The therapist recommended, and Jane agreed, to a medication consult. Around session 43, Jane began taking Zoloft (Sertraline); her depressive symptoms seemed to show a clear drop about one month later (see Figure 2), suggesting that she had responded to the drug.

Near the end of treatment, as Jane began feeling better, she followed through with her plans to break off the relationship with her boyfriend. She also resumed driving (she had stopped many years previously, following an accident, fearing "I'll be inept."). Jane's progress in overcoming her depressive symptoms is reflected in Figure 2; weekly BDI scores were discontinued before the end of treatment because Jane's depressive symptoms had remitted.

At post-treatment, Jane completed the BDI, the DAS, and the Assertiveness Inventory. Her BDI was 10, indicating her depressive symptoms had largely remitted, though she remained somewhat dysthymic. Her DAS score was 104, suggesting a significant reduction in her reported dysfunctional beliefs. Part of this reduction, however, is likely due to the change in Jane's mood state--since a body of research has shown that mood influences reported dysfunctional attitudes (Alloy et al., 1992; Persons & Miranda, 1992). To test this hypothesis, we would ask Jane to agree to a negative mood induction before completing the post-treatment DAS. Jane's scores on the AI indicated that she made gains in this area as well.

Jane has agreed to a follow-up assessment six months after ending her treatment. At that time, she will meet with the therapist, who will assess her depressive symptoms, other difficulties, and recent life events in an interview. Jane will also complete a BDI, the DAS, and

the AI.

Summary

In this chapter we describe an approach to the assessment of depression that is informed by empirically validated cognitive-behavioral theories of depression, yet remains useful in clinical settings. Our approach asks the clinician to adopt a cognitive-behavioral diathesis-stress framework, from a perspective to guide the case-formulation and on-going hypothesis testing that occurs during therapy.

With the exception of instruments that help clinicians detect the presence of a depression diagnosis, we focus on measures that assess depression from the perspective of the cognitive diathesis-stress theories. Thus, we describe instruments that measure the overall symptom profile of depression as well as its cognitive, behavioral, and mood components; life events; and the underlying cognitive diathesis. Although the diathesis-stress theories are nomothetic theories, assessment of clinical cases is idiographic, and therefore we discuss the adaptation of nomothetic measures to idiographic cases.

This chapter focuses on assessment of depression, not assessment of the depressed patient. Assessment of the depressed patient typically requires assessment of many domains not addressed here, including comorbid Axis I, Axis II, and Axis III disorders and problems, as well as the psychosocial difficulties typically seen in depressed patients. It is also useful to assess a depressed patient's strengths and resources. Information from all of these areas helps a clinician identify target symptoms and develop treatment goals. Thus, a complete discussion of the assessment of the depressed patient most likely requires a book--a book that includes material presented in many of the other chapters of this volume.

References

Abramson, L. Y., & Metalsky, G. I. (1986). The Cognitive Style Questionnaire: Measurement of negative cognitive styles about self and consequences. Unpublished manuscript, University of Wisconsin, Madison, Wisconsin.

Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1989). Hopelessness depression: A theory-based subtype of depression. Psychological Review, 96, 358-372.

Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. Journal of Abnormal Psychology, 87, 49-74.

Agency for Health Care Policy and Research, U. S. Public Health Service. (1993b). Clinical Practice Guideline Number 5. Depression in Primary Care: Volume 2. Treatment of Major Depression. Rockville, Maryland: Author.

Aitken, R. C. B. (1969). Measurement of feelings using visual analogue scales. Proceedings of the Royal Society of Medicine, 62, 989-993.

Alloy, L. B., Albright, J. S., Fresco, D. M., & Whitehouse, W. G. (1995) Stability of cognitive styles across the mood swings of DSM-III cyclothymics, dysthymics, and hypomanics: A longitudinal study in college students. Unpublished manuscript, Temple University, Philadelphia, PA.

Alloy, L. B., Kayne, N. T., Romer, D., & Crocker, J. (1995) Predicting depression and elation reactions in the classroom: A test of an attributional diathesis-stress theory of depression. Manuscript under review., Temple University, Philadelphia, PA.

American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders. (3rd ed. Revised). Washington, D.C.: author.

American Psychiatric Association (1993). Practice Guideline for Major Depressive Disorder in Adults. The American Journal of Psychiatry, 150, Supplement.

American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders. (4th ed.). Washington, D.C: author.

Barlow, D. H., Hayes, S. C., & Nelson, R. O. (1984). The scientist-practitioner: Research and accountability in clinical and educational settings. New York: Pergamon.

Barnett, P. A., & Gotlib, I. H. (1988). Psychosocial functioning and depression: Distinguishing among antecedents, concomitants, and consequences. Psychological Bulletin, 104, 97-126.

Beck, A. T. (1967). Depression: Clinical, experimental, and theoretical aspects. New York: Hoeber.

Beck, A. T. (1976). Cognitive therapy and the emotional disorders. New York: International Universities Press.

Beck, A. T. (1983). Cognitive therapy of depression: New Perspectives. In P. J. Clayton & J. E. Barrett (Eds.), Treatment of Depression: Old Controversies and New Approaches (pp. 265-290). New York: Raven Press.

Beck, A. T., & Beck, R. W. (1972). Screening depressed patients in family practice: A rapid technique. Postgraduate Medicine, 52, 81-85.

Beck, A. T., Epstein, N., Harrison, R., & Emery, G. (1983) Development of the Sociotropy-Autonomy Scale: A measure of personality factors in psychopathology. Unpublished manuscript, University of Pennsylvania.

Beck, A. T., Kovacs, M., & Weissman, A. (1979). Assessment of suicidal intention: the Scale for Suicide Ideation. Journal of Consulting and Clinical Psychology, 47, 343-352.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). Cognitive therapy of depression. New York: Guilford.

Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. Clinical Psychology Review, 8, 77-100.

Beck, A. T., Steer, R. A., Kovacs, M., & Garrison, B. (1985). Hopelessness and eventual suicide: A 10-year prospective study of patients hospitalized with suicidal ideation. American Journal of Psychiatry, 142, 559-563.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. Archives of General Psychiatry, 4, 53-63.

Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: the Hopelessness Scale. Journal of Consulting and Clinical Psychology, 42, 861-865.

Brown, G. W., Bifulco, A., Harris, T., & Bridge, L. (1986). Life stress, chronic subclinical symptoms and vulnerability to clinical depression. Journal of Affective Disorders, 11, 1-19.

Brown, G. W., Bifulco, A., & Harris, T. O. (1987). Life events, vulnerability and onset of depression: Some refinements. British Journal of Psychiatry, 150.

Brown, G. W., & Harris, T. (1978). Social origins of depression. New York: The Free Press.

Brown, G. W., Harris, T. O., & Peto, J. (1973). Life events and psychiatric disorders: II. Nature of causal link. Psychological Medicine, 3, 159-176.

Brown, T. A., Di Nardo, P. A., & Barlow, D. H. (1994). Anxiety Disorders Interview Schedule for DSM-IV: (ADIS-IV). Albany, NY: Graywind Publications Incorporated.

Burgess, E., & Haaga, D. A. F. (1994). The Positive Automatic Thoughts Questionnaire (ATQ-P) and the Automatic Thoughts Questionnaire--Revised (ATQ--RP): Equivalent measures of positive thinking. Cognitive Therapy & Research, 18, 15-23.

Burns, D. D. (1980). Feeling good: The new mood therapy. New York: William Morrow.

Cane, D. B., Olinger, L. J., Gotlib, I. H., & Kuiper, N. A. (1986). Factor structure of the Dysfunctional Attitude Scale in a student population. Journal of Clinical Psychology, 42, 307-309.

Cho, M. J., Moscicki, E. K., Narrow, W. E., & Rae, D. S. (1993). Concordance between two measures of depression in the Hispanic Health and Nutrition Examination Survey. Social Psychiatry & Psychiatric Epidemiology, 28, 156-163.

Clark, D. A., & Beck, A. T. (1991). Personality factors in dysphoria: A psychometric refinement of Beck's Sociotropy-Autonomy Scale. Journal of Psychopathology & Behavioral Assessment, 13, 369-388.

Cone, J. D. (1986). Idiographic, nomothetic, and related perspectives in behavioral assessment. In R. O. Nelson & S. C. Hayes (Eds.), Conceptual foundations of behavioral assessment (pp. 111-128). New York: Guilford.

Corcoran, K., & Fischer, J. (1987). Measures for Clinical Practice: A Sourcebook. New York: Free Press.

Coyne, J. C. (1976a). Depression and the response of others. Dissertation Abstracts International, 36, 5785.

Coyne, J. C. (1976b). Toward an interactional description of depression. Psychiatry, 39, 28-40.

Coyne, J. C., & Gotlib, I. H. (1983). The role of cognition in depression: A critical appraisal. Psychological Bulletin, 94, 472-505.

DeRubeis, R. J., Evans, M. D., Hollon, S. D., Garvey, M. J., Grove, W. M., & Tuason, V. B. (1990). How does cognitive therapy work? Cognitive change and symptom change in cognitive therapy and pharmacotherapy for depression. Journal of Consulting & Clinical Psychology, 58, 862-869.

Di Nardo, P. A., Brown, T. A., & Barlow, D. H. (1994). Anxiety Disorders Interview Schedule for DSM-IV: Lifetime Version (ADIS-IV-L). Albany, NY: Graywind Publications Incorporated.

Di Nardo, P. A., Moras, K., Barlow, D. H., Rapee, R. M., & Brown, T. A. (1993). Reliability of DSM-IIIR anxiety disorder categories using the Anxiety Disorders Interview Schedule-Revised. Archives of General Psychiatry, 50, 251-256.

Dobson, K. S., & Breiter, H. J. (1983). Cognitive assessment of depression: Reliability and validity of three measures. Journal of Abnormal Psychology, 92, 107-109.

Endicott, J., & Spitzer, R. L. (1978). A diagnostic interview: The schedule for affective disorders and schizophrenia. Archives of General Psychiatry, 35, 837-844.

Evans, I. M. (1993). Constructional perspectives in clinical assessment. Psychological Assessment, 5, 264-272.

Ferster, C. B., & Skinner, B. F. (1957). Schedules of Reinforcement. New York: Appleton-Century-Crofts.

First, M. B., Gibbon, M., Spitzer, R. L., & Williams, J. B. W. (1995). User's Guide for the Structured Clinical Interview for DSM-IV Axis I Disorders. New York: Biometrics Research.

First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. W. (1995) Structured CLinical Interview for DSM-IV Axis I Disorders - Patient Edition (SCID-I/P, Version 2.0). New York: Biometrics Research.

Fresco, D. M., Craighead, L. W., & Koons, A. N. (1994a, November). A comparison of two techniques for measuring attributional style: How the ASQ and the CAVE relate to each other and to depression. A poster presented at the annual meeting of the Association for the Advancement of Behavior Therapy, San Diego, CA.

Fresco, D. M., Craighead, L. W., & Koons, A. N. (1994b, September). Two approaches to the comorbidity of depression and anxiety: Comparing attributional style to sociotropy and autonomy. A poster presented at the annual meeting of the Society for Research in Psychopathology, Coral Gables, FL.

Fresco, D. M., Craighead, L. W., Sampson, W. S., & Koons, A. N. (1995, November). The Content Analysis of Verbatim Explanations technique: Applications within psychopathology research and therapy process. In D. M. Fresco & S. L. Sayers. (Chairs) Beyond the questionnaire: Broadening the behavioral and cognitive sciences with content analysis techniques. A paper presented at the annual meeting of the Association for the Advancement of Behavior Therapy. Washington, D. C.

Gambrill, E. D. & Richey, C. A. (1975). An assertion inventory for use in assessment and research. Behavior Therapy, 6, 550-561.

Garrison, C. Z., Addy, C. L., Jackson, K. L., & McKeown, R. E. (1991). The CES-D as a screen for depression and other psychiatric disorders in adolescents. Journal of the American Academy of Child & Adolescent Psychiatry, 30, 636-641.

Gotlib, I. H., & Robinson, L. A. (1982). Responses to depressed individuals: Discrepancies between self-report and observer-rated behavior. Journal of Abnormal Psychology, 91, 231-240.

Hamilton, M. (1960). A rating scale for depression. Journal of Neurology, Neurosurgery, and Psychiatry, 23, 56-62.

Hammen, C., Ellicott, A., & Gitlin, M. J. (1992). Stressors and sociotropy/autonomy: A longitudinal study of their relationship to the course of bipolar disorder. Special Issue: Cognitive vulnerability to psychological dysfunction. Cognitive Therapy & Research, 16, 409-418.

Hathaway, S. R., & McKinley, J. C. (1942). A multiphasic personality schedule (Minnesota): III. The measurement of symptomatic depression. Journal of Psychology, 14, 73-84.

Hathaway, S. R., & McKinley, J. C. (1951). MMPI manual (Rev. ed., 1951). New York: The Psychological Corporation.

Hayes, S. C., Nelson, R. O., & Jarrett, R. B. (1987). The treatment utility of assessment: A functional approach to evaluating assessment quality. American Psychologist, 42, 963-974.

Haynes, S. N. (1992). Models of causality in psychopathology: Toward dynamic, synthetic and nonlinear models of behavior disorders. New York: Macmillan Publishing Company.

Haynes, S. N., & O'Brien, W. H. (1990). Functional analysis in behavior therapy. Clinical Psychology Review, 10, 649-668.

Hill, C. V., Oei, T. P., & Hill, M. A. (1989). An empirical investigation of the specificity and sensitivity of the Automatic Thoughts Questionnaire and Dysfunctional Attitudes Scale. Journal of Psychopathology & Behavioral Assessment, 11, 291-311.

Hollon, S. D., & Kendall, P. C. (1980). Cognitive self-statements in depression: Development of an automatic thoughts questionnaire. Cognitive Therapy & Research, 4, 383-395.

Hollon, S. D., Kendall, P. C., & Lumry, A. (1986). Specificity of depressotypic cognitions in clinical depression. Journal of Abnormal Psychology, 95, 52-59.

Holmes, T. H., & Rahe, R. H. (1967). The Social Readjustment Rating Scale. Journal of Psychosomatic Research, 11, 213-218.

Ingram, R. E., & Wisnicki, K. S. (1988). Assessment of positive automatic cognition. Journal of Consulting & Clinical Psychology, 56, 898-902.

Joiner, T. E., Alfano, M. S., & Metalsky, G. I. (1992). When depression breeds contempt: Reassurance seeking, self-esteem, and rejection of depressed college students by their roommates. Journal of Abnormal Psychology, 101, 165-173.

Kanner, R. D., Coyne, J. C., Shaeffer, C., & Lazarus, R. J. (1981). Comparison of two modes of stress management: Daily hassles and uplifts versus major life events. Journal of Behavioral Medicine, 4, 1-39.

Kazdin, A. E. (1974). Self-monitoring and behavior change. In M. J. Mahoney & C. E. Thoresen (Eds.), Self-control: Power to the person Monterey, CA: Brooks/Cole.

Kazdin, A. E. (1993). Evaluation in clinical practice: Clinically sensitive and systematic methods of treatment delivery. Behavior Therapy, 24, 11-45.

Kiresuk, T. J., & Sherman, R. E. (1968). Goal Attainment Scaling: A general method for evaluating comprehensive community mental health programs. Community Mental Health Journal, 4, 443-453.

Kohlenberg, R. J., & Tsai, M. (1991). Functional analytic psychotherapy: Creating intense and curative therapeutic relationships. New York: Plenum.

Kulka, R. A., Schlenger, W. E., Fairbank, J. A., Hough, R. L., Jordon, B. K., Marmar, C. R., Weiss, D. S., & Grady, D. A. (1990). Trauma and the Vietnam War Generation: Report of findings from the National Vietnam Veterans Readjustment Study: Bruner/Mazel Psychosocial Stress Series No. 18. New York: Bruner/Mazel Inc.

Lewinsohn, P. M. (1974a). A behavioral approach to depression. In R. J. Friedman & M. M. Katz (Eds.), The psychology of depression: Contemporary theory and research. New York: John Wiley & Sons.

Lewinsohn, P. M. (1974b). Clinical and theoretical aspects of depression. In K. S. Calhoun, H. E. Adams, & K. M. Mitchell (Eds.), Innovative treatment methods of psychopathology New York: Wiley.

Lewinsohn, P. M., Muñoz, R. F., Youngren, M. A., & Zeiss, A. M. (1978). Control your depression. Englewood Cliffs, N. J.: Prentice-Hall, 1978.

Lewinsohn, P. M., Sullivan, J. M., & Grosscup, S. J. (1980). Changing reinforcing events: An approach to the treatment of depression. Psychotherapy: Theory, Research & Practice, 17, 322-334.

Linehan, M. M. (1981). A social-behavioral analysis of suicide and parasuicide: Implications for clinical assessment and treatment. In H. Glazer & J. Clarkin (Eds.), Depression: Behavioral and directive intervention strategies (pp. 229-294). New York: Brunner/Mazel.

Linehan, M. M. (1993). Cognitive-behavioral treatment of borderline personality disorder. New York: The Guilford Press.

Mahard, R. E. (1988). The CES-D as a measure of depressive mood in the elderly Puerto Rican population. Journals of Gerontology, 43, 24.

Metalsky, G. I., Halberstadt, L. J., & Abramson, L. Y. (1987). Vulnerability to depressive mood reactions: Toward a more powerful test of the diathesis-stress and causal mediation components of the reformulated theory of depression. Journal of Personality and Social Psychology, 52, 386-393.

Metalsky, G. I., & Joiner, T. E. (1992). Vulnerability to depressive symptomatology: A prospective test of the diathesis-stress and causal mediation components of the hopelessness theory of depression. Journal of Personality & Social Psychology, 63, 667-675.

Mintz, J., & Kiesler, D. J. (1982). Individualized measures of psychotherapy outcome. In P. C. Kendall & J. N. Butcher (Eds.), Handbook of research methods in clinical psychology (pp. 491-534). New York: John Wiley & Sons.

Monroe, S. M. (1982a). Assessment of life events: Retrospective vs. concurrent strategies. Archives of General Psychiatry, 39, 606-610.

Monroe, S. M. (1982b). Life events assessment: Current practices, emerging trends. Clinical Psychology Review, 2, 435-453.

Monroe, S. M. (1983). Major and minor life events as predictors of psychological distress: Further issues and findings. Journal of Behavioral Medicine, 6, 189-205.

Monroe, S. M., & Roberts, J. E. (1990). Conceptualizing and measuring life stress: Problems, principles, procedures, progress. Special Issue: II-IV. Advances in measuring life stress. Stress Medicine, 6, 209-216.

Monroe, S. M., & Simons, A. D. (1991). Diathesis-stress theories in the context of life stress

research: Implications for the depressive disorders. Psychological Bulletin, 110, 406-425.

Nezu, A. M., & Nezu, C. M. (1993). Identifying and selecting target problems for clinical interventions: A problem-solving model. Psychological Assessment, 5, 254-263.

Persons, J. B. (1989). Cognitive therapy in practice: A case formulation approach. New York: Norton.

Persons, J. B. (1992). The patient with multiple problems. In A. Freeman & F. Dattilio (Eds.), Casebook of cognitive-behavior therapy (pp. 241-247). New York: Plenum.

Persons, J. B., & Burns, D. D. (1985). Mechanisms of action of cognitive therapy: the relative contributions of technical and interpersonal interventions. Cognitive Therapy and Research, 9, 539-551.

Persons, J. B., Burns, D. D., Perloff, J. M., & Miranda, J. (1993). Relationships between symptoms of depression and anxiety and dysfunctional beliefs about achievement and attachment. Journal of Abnormal Psychology, 102, 518-524.

Persons, J. B., & Miranda, J. (1992). Cognitive theories of vulnerability to depression: Reconciling negative evidence. Cognitive Therapy and Research, 16, 485-502.

Persons, J. B., Miranda, J., & Perloff, J. M. (1991). Relationships between depressive symptoms and cognitive vulnerabilities of achievement and dependency. Cognitive Therapy & Research, 15, 221-235.

Peterson, C. (1992). Explanatory style. In C. P. Smith (Eds.), Handbook of thematic content analysis (pp. 376-382). New York: Cambridge.

Peterson, C., Bettes, B. A., & Seligman, M. E. (1985). Depressive symptoms and unprompted causal attributions: Content analysis. Behaviour Research & Therapy, 23, 379-382.

Peterson, C., Luborsky, L., & Seligman, M. E. (1983). Attributions and depressive mood shifts: A case study using the symptom-context model. Journal of Abnormal Psychology, 92, 96-103.

Peterson, C., Schulman, P., Castellon, C., & Seligman, M. E. P. (1992). The explanatory style scoring manual. In C. P. Smith (Eds.), Handbook of thematic content analysis (pp. 383-392). New York: Cambridge.

Peterson, C., & Seligman, M. E. P. (1984) Content analysis of verbatim explanations: The CAVE technique for assessing explanatory style. Unpublished manuscript, University of Pennsylvania.

Peterson, C., Semmel, A., von Baeyer, C., Abramson, L. Y., Metalsky, G. I., & Seligman, M. E. P. (1982). The Attributional Style Questionnaire. Cognitive Therapy & Research, 6, 287-300.

Peterson, C., & Villanova, P. (1988). An Expanded Attributional Style Questionnaire. Journal of Abnormal Psychology, 97, 87-89.

Piotrowski, C., Sherry, D., & Keller, J. W. (1985). Psychodiagnostic test usage: A survey of the Society for Personality Assessment. Journal of Personality Assessment, 49, 115-119.

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. Applied Psychological Measurement, 1, 385-401.

Rehm, L. P. (1988). Assessment of depression. In A. S. Bellack & M. Hersen (Eds.), Behavioral assessment: A practical guide (pp. 313-364). New York: Pergamon Press.

Roberts, R. E., & Vernon, S. W. (1983). The Center for Epidemiological Studies Depression Scale: Its use in a community sample. American Journal of Psychiatry, 140, 41-46.

Robins, C. J. (1988). Attributions and depression: Why is the literature so inconsistent? Journal of Personality & Social Psychology, 54, 880-889.

Robins, C. J. (1990). Congruence of personality and life events in depression. Journal of Abnormal Psychology, 99, 393-397.

Robins, C. J., & Block, P. (1988). Personal vulnerability, life events, and depressive symptoms: A test of a specific interactional model. Journal of Personality & Social Psychology, 54, 847-852.

Robins, C. J., Hayes, A. M., Block, P., & Kramer, R. J. (1995). Interpersonal and achievement concerns and the depressive vulnerability and symptom specificity hypotheses: A prospective study. Cognitive Therapy & Research, 19, 1-20.

Robins, C. J., Ladd, J., Welkowitz, J., Blaney, P. H., Diaz, R., & Kutcher, G. (1993). The Personal Style Inventory: Preliminary validation studies of new measures of sociotropy and autonomy. Unpublished manuscript. Duke University Medical Center, Durham, NC.

Robins, C. J., & Luten, A. G. (1991). Sociotropy and autonomy: Differential patterns of clinical presentation in unipolar depression. Journal of Abnormal Psychology, 100, 74-77.

Robins, L. N., Helzer, J. E., Croughan, J. L., & Ratcliff, K. S. (1981). National Institute of Mental Health diagnostic interview schedule: Its history, characteristics, and validity. Archives of General Psychiatry, 38, 381-389.

Rude, S. S., & Burnham, B. L. (1993). Do interpersonal and achievement vulnerabilities interact with congruent events to predict depression? Comparison of DEQ, SAS, DAS, and combined scales. Cognitive Therapy & Research, 17, 531-548.

Sarason, I. G., Johnson, J. H., & Siegel, J. M. (1978). Assessing the impact of life changes: Development of the Life Experiences Survey. Journal of Consulting and Clinical Psychology, 46, 932-946.

Schulman, P., Castellon, C., & Seligman, M. E. (1989). Assessing explanatory style: The content analysis of verbatim explanations and the Attributional Style Questionnaire. Behaviour Research and Therapy, 27, 505-512.

Seligman, M. E., Abramson, L. Y., Semmel, A., & von Baeyer, C. (1979). Depressive attributional style. Journal of Abnormal Psychology, 88, 242-247.

Seligman, M. E. P. (1975). Helplessness: On depression, development, and death. San Francisco: W.H. Freeman.

Spitzer, R. L., Williams, J. B., Gibbon, M., & First, M. B. (1992). The Structured Clinical Interview for DSM-III-R (SCID). I: History, rationale, and description. Archives of General Psychiatry, 49, 624-9.

Steer, R. A., Beck, A. T., & Garrison, B. (1986). Applications of the Beck Depression Inventory. In N. Sartorius & T. A. Ban (Eds.), Assessment of Depression (pp. 121-142). Geneva, Switzerland: World Health Organization.

Surber, R. W. (Ed.). (1994). Clinical case management: A guide to comprehensive treatment of serious mental illness. Thousand Oaks, CA: Sage Publications.

Sweeney, P. D., Anderson, K., & Bailey, S. (1986). Attributional style in depression: A meta-analytic review. Journal of Personality & Social Psychology, 50, 974-991.

Thoresen, C. E., & Mahoney, M. J. (1974). Behavioral self-control. New York: Holt, Rinehart, & Winston.

Turkat, I. D. (Ed.) (1985). Behavioral case formulation. New York: Plenum.

Watson, D. (1988). Intraindividual and interindividual analyses of positive and negative affect:

Their relation to health complaints, perceived stress, and daily activities. Journal of Personality & Social Psychology, 54, 1020-1030.

Watson, D., Clark, L. A., & Carey, G. (1988a). Positive and negative affectivity and their relation to anxiety and depressive disorders. Journal of Abnormal Psychology, 97, 346-353.

Watson, D., Clark, L. A., & Tellegen, A. (1988b). Development and validation of brief measures of positive and negative affect: The PANAS scales. Journal of Personality & Social Psychology, 54, 1063-1070.

Weissman, A., & Beck, A. T. (1978, November). Development and validation of the dysfunctional attitudes scale. A paper presented at the annual meeting of the Association for the Advancement of Behavior Therapy, Chicago.

Wilson, G. T., & O'Leary, K. D. (1980). Principles of Behavior Therapy. Englewood Cliffs, NJ: Prentice-Hall.

Youngren, M. A., & Lewinsohn, P. M. (1980). The functional relation between depression and problematic interpersonal behavior. Journal of Abnormal Psychology, 89, 333-341.

Zuckerman, M., & Lubin, B. (1965). Manual for the multiple affective adjective checklist. San Diego: Educational and Industrial Testing Service.

Zuckerman, M., Lubin, B., & Rinck, C. M. (1983). Construction of new scales for the Multiple Affect Adjective Check List. Journal of Behavioral Assessment, 5, 119-129.

Zung, W. W. K. (1965). A self-rating depression scale. Archives of General Psychiatry, 12, 63-70.

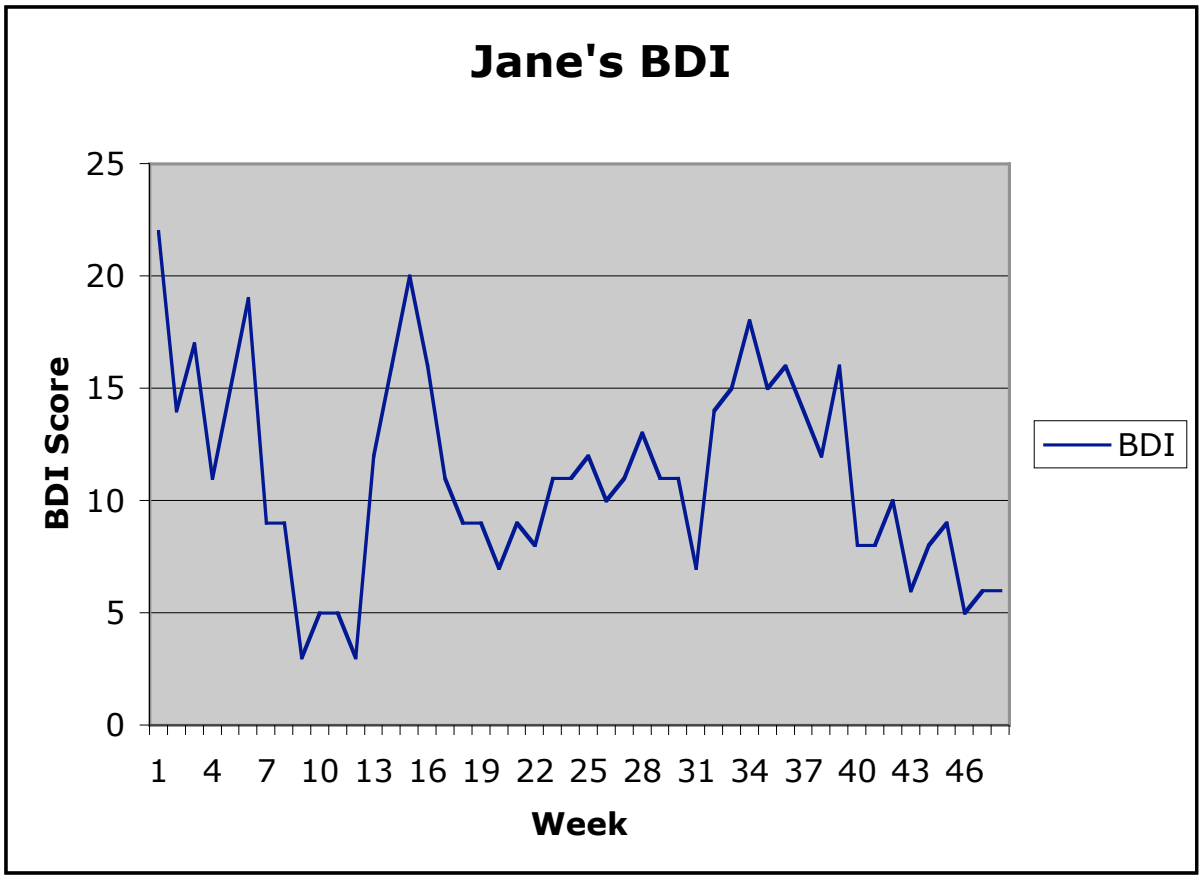
Figure Caption

Figure 1 Thought Record

Figure 2 Weekly Beck Depression Inventory (BDI) scores for the case example, "Jane." Note that the BDI was discontinued prior to the termination of treatment.

THOUGHT RECORD

DATE	SITUATION (Event, memory, attempt to do something, etc.)	BEHAVIOR(S)	EMOTIONS	THOUGHTS	RESPONSES


Jane's BDI
BDI Score
25
20
15
10
5
0
1 4 7 10 13 16 19 22 25 28 31 34 37 40 43 46
Week
BDI