# PART ONE

# DEFINING EVIDENCE-BASED PRACTICE IN SOCIAL WORK

# DEFINITION, PROCESSES, AND PRINCIPLES

This first chapter provides an overview of some of the core concepts, processes, and principles that characterize evidence-based practice in social work (EBPSW). The key components of EBPSW at the clinical practice level are the main focus of this text and will be more thoroughly described in chapters 2-4, culminating in an outline of the critical EBPSW service plan.

# THE TRADITIONAL PRACTICE-THEORY APPROACH TO SOCIAL WORK

Proponents of social work practice theories have struggled to one degree or another with three main questions. What is the nature of human problems and adaptation in the social environment? What interventions are most likely to ameliorate our clients' psychosocial problems and enhance their ability to cope? How can we tell if our efforts have been successful? Variants of practice theories (known as schools of thought, orientation) range from the conceptually specific to the general and abstract. They include psychodynamic and other personality theories, social cognitive theory and cognitive-behavioral interventions, various family systems theories and practices, general systems and ecosystems models, and, more recently, empowerment, solution-focused, and constructivist approaches. Students and practitioners typically use one or two preferred practice theories to guide assessment and intervention with their clients.

Practice theories vary considerably in the extent to which they address salient questions regarding human behavior theory, provide adequate detail to guide assessment and intervention methods, and use research and evaluation methods to support their theories and practices. For example, humanist, constructivist, empowerment, solution-focused, and strength-based models generally eschew human behavior research altogether, offer some practical techniques for enhancing client coping abilities, and have provided little evidence to support the effectiveness of their intervention methods. Psychodynamic theories of psychopathology have long lacked empirical support, and there is little evidence to support unique or specific aspects of psychodynamic techniques. Yet the

emphasis on a strong therapeutic relationship in practice has been demonstrated through intervention-process research to be an essential ingredient for effective practice. Although family systems theories have highlighted the importance of understanding interactions among family members, evidence for the effectiveness of some popular family treatment models remains thin, with the exception of structural and behaviorally oriented family therapies. Lastly, social cognitive theory has produced a vast body of knowledge regarding psychosocial disorders, and cognitive-behavioral interventions for many disorders are now supported by an impressive body of outcome research. Some would argue, however, that a disproportionate emphasis has been placed on the role of cognition at the expense of other social-environmental determinants. In brief, no single practice theory provides a sufficiently comprehensive and valid foundation for understanding and treating the full range of serious buman problems confronted by social workers.

#### EFFICACIOUS OR EFFECTIVE PRACTICE? THE PRESSURES FOR ACCOUNTABILITY

Although many social workers and practitioner-researchers in the allied professions have long endorsed the development and use of effective practices, there is a growing mandate from funding bodies, regulatory agencies, and other professional bodies to ensure accountability in service delivery. As a result of these influences, psychosocial interventions and programming are now increasingly guided by outcome research and program evaluation instead of theoretical, pragmatic, or ideological preferences (e.g., Howard, McMillen, & Pollio, 2003; Gambrill, 2004; Thyer, 2004). However, there are a number of interpretations among practitioners, policymakers, administrators, and academics as to what becoming more accountable means.

There have been two prevailing strategies in social work. The first emphasizes efficacy, that is, selecting and implementing interventions that have been shown to be efficacious in controlled practice research. In this approach, practitioners use the existing outcome research to help guide their selection of an intervention once they have conducted a thorough assessment. This approach might be called the outcome research or efficacy research approach to evidence-based practice. The effectiveness approach emphasizes the routine use of practice evaluation methods as part of practice to demonstrate practice effectiveness. In this approach, practitioners incorporate evaluation methods into practice and, based on feedback from the client, make incremental changes to the intervention in the hopes of achieving optimal client outcomes.

For the efficacy model, the body of research used to guide treatment selection is typically based on a series of randomized controlled trials conducted under relatively ideal circumstances. Practitioners are usually trained specifically in the interventions that are being tested, clients are often sampled by strict selection criteria, and multiple standardized measures are employed at assessment, at planned intervals during intervention, and at some follow-up period to measure client change. Controlled trials may be the best tool that researchers have to test whether an intervention model is more efficacious than no intervention or some alternative intervention (often some approach that has been employed as "treatment as usual" in the field). After several controlled trials have shown the intervention to be efficacious across different samples, the approach may be deemed a "promising" or "established" treatment by a committee of experts qualified to critically review outcome research. Practitioners can then learn these new approaches and implement them in their own practice. Many social work practitioners, researchers, and educators have endorsed the use of outcome research to guide the selection of social work interventions (J. Fischer, 1973; K. Wood, 1978; Reid, 1997a, 1997b; Gambrill, 2001; O'Hare, Tran, & Collins, 2002; Thyer, 2004).

By contrast, the effectiveness approach to evidence-based practice emphasizes the process of evaluating social work interventions in everyday practice. There are two variations of this process-oriented approach. First, earlier proponents of "empirical practice" social work focused almost exclusively on "evaluating one's own practice" (K. Corcoran & Gingerich, 1994; Bloom, Fischer, & Orme, 1999), where practitioners employ qualitative case analysis or single-subject designs (or both) to monitor and evaluate the intervention. However, early proponents of practice monitoring and evaluation paid little attention to a key question; what knowledge base and decision-making criteria guided the initial choice of intervention? More recently, a second process-oriented strategy has been promulgated in the social work literature. Although access to and use of existing outcome research is acknowledged as an important first step, it is also stressed that applying the findings of outcome research to unique cases requires a considerable degree of flexibility and "practice wisdom" in that practitioners need to adjust the intervention, based on recursive evaluation (Klein & Bloom, 1995; A. Rosen, 2003). In other words, iterative and reciprocal feedback between client and practitioner is needed to demonstrate whether treatment is going well, and this new information can be used to make adjustments that will lead to an optimal outcome for the client. Although few might argue with this model in principle, the Iterative client-practitioner process is complex and not yet well understood. In addition, no empirically validated process models have been developed or evaluated to date for an array of serious psychosocial disorders. At this point, practitioners should be prepared to be flexible and rely on informed judgment, critical thinking, and the monitoring and evaluation of cases to guide the progress of their interventions.

In reality, the distinction between efficacy and effectiveness is far from absolute, and both concepts are essential to implementing EBPSW (O'Hare, 1991, 2002; A. Reid, 1997a, 1997b; Gambrill, 2001, 2004; Proctor, 2003; A. Rosen, 2003). In this text, the implementation of EBPSW emphasizes outcome research to help guide the initial choice of intervention, and monitoring and evaluation methods to facilitate optimal implementation. The use of knowledge gleaned from reviews of the research literature (based on controlled trials) is essential and

increasingly required for providing clinical services. Because of considerable variability in client characteristics, client needs, and problem circumstances, however, flexibility and adjustments to the initial intervention plan are usually necessary to maximize optimal intervention.

Although current guidelines for decision making during the implementation process are far from clear, practitioners should consider themselves to be on very firm empirical grounds when they employ the core ingredients of effective helping: good listening skills, empathic attunement, positive regard, and motivational enhancement skills. In addition, the use of client self-monitoring techniques is often an effective way to engage many clients as collaborators and evaluators of their own intervention. Having clients test out the results of the intervention in their everyday environment is not only a powerful form of idiographic evaluation, but an empowering therapeutic tool that can enhance self-efficacy by putting the client in the driver's seat. Client engagement and self-monitoring skills are well-supported in the practice literature and will be examined in more detail in chapter 3. With a sound practitioner-client working relationship in place, both qualitative and quantitative evaluation methods can be seamlessly integrated into routine practice to help practitioners and clients collaborate on the optimal implementation of evidence-based practices.

# DEFINING EBPSW: A COMPREHENSIVE STRATEGY FOR CONDUCTING ASSESSMENT, INTERVENTION, AND EVALUATION

Rather than continuing the search for one-size-fits-all practice theory, patching together eclectic models on an impromptu basis, or searching for the holy grall of evaluation methods, social workers need an operable framework for guiding assessment, intervention, and evaluation to accommodate a wide range of practice situations. In this text, EBPSW is defined as the planned use of empirically supported assessment and intervention methods combined with the fudicious use of monitoring and evaluation strategies for the purpose of improving the psychosocial well being of clients. Here are the primary characteristics of EBPSW.

Conducting qualitative assessment informed by current human behavior research and accompanied by the use of reliable and valid quantitative assessment instruments (i.c., scales, indexes). These instruments also provide a baseline for further monitoring and evaluation.

Sclecting and implementing interventions that have been shown to be efficacious in controlled outcome research. Reasonable flexibility in implementing evidence-based practices is usually necessary to accommodate client needs and situational factors.

Implementing evaluation methods as part of practice at the individual and program level.

Evidence-based practice is not a new practice theory. It is a procedural framework that emphasizes the use of current scientific knowledge to support assessment and intervention, and employs qualitative and quantitative evaluation methods that address the evaluative question at hand. When conducting evidence-based assessment, the practitioner

goes beyond general theoretical perspectives to use problem-specific knowledge, such as research findings on schizophrenia or child abuse, to identify important biopsychosocial risk and protective factors that cause and maintain the client's problems;

assesses clients' well-being on multidimensional levels (e.g., psychological, social);

employs functional analysis to describe how more proximate cognitive, behavioral, physiological, interpersonal, and social factors interact over time and across situations;

incorporates the client's unique understanding of the problem into the assessment;

uses multiple methods of data collection from multiple sources;

pragmatically emphasizes problems that are amenable to change; and

employs scales and indexes to enhance the reliability and validity of the assessment and to provide a baseline for monitoring and evaluation.

In Intervention the practitioner

uses representative research based on practice outcome;

accommodates clients' unique construction of the problem, individual differences, circumstances, preferences, and the unpredictability of day-today events and responses to the intervention;

gives priority to interventions shown to be effective in controlled trials; and incorporates other methods as needed, preferably those supported by current outcome research.

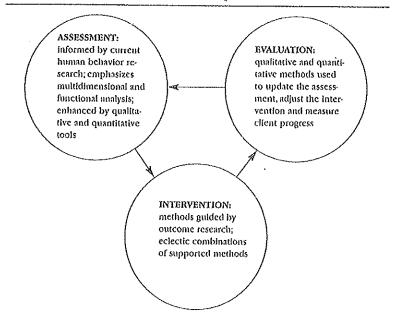
Monitoring and evaluation methodologies are used to

incrementally adjust the interventions to optimally meet client needs; measure client outcomes on an individual level; and

aggregate data for the purposes of quality assurance and program evaluation.

Although qualitative case analysis is important, quantitative data should also be part of individual and program evaluation. Routine aggregation of data is increasingly required by funding bodies as a condition of contracting for services in both the public and private sector.

A micromodel of EBPSW (fig 1.1) illustrates the relationships among assessment, intervention, and evaluation.



## ASSUMPTIONS ABOUT VERIFIABLE KNOWLEDGE

EBPSW assumes that human experience and problem solving can be better understood through research (both qualitative and quantitative) to explain problems and evaluate ways of ameliorating them. People's problems are seen as complex (multidimensional, interactional, context-dependent), and, although the uniqueness of each person is understood, evidence-based practitioners believe that generalizations based on data derived from research with large groups of individuals can provide useful knowledge for assessment and intervention. Replication and generalization of important findings are seen as key to building a professional knowledge base, and employing such evidence is understood to be necessary for the conduct of ethical professional practice. Social scientists reject the notion that knowledge is merely the residue of the sociopolitical scene and believe that, with the use of adequate methods over time, useful knowledge can emerge to help practitioners better understand human problems and more effectively help individuals cope with them. Scientifically oriented practitioners tend to see claims of "intuition, deep and rich insights" as arbitrary (if not self-indulgent) and in need of some agreed-upon definitions and external empirical testing (Dawes, 1989).

EBPSW is clearly commensurate with the scientist-practitioner tradition. However, the implementation of evidence-based practices also requires em-

pathic engagement with clients, keen judgment, good critical thinking, qualitative and quantitative data collection, and flexible response to pragmatic considerations through critical feedback loops with the client within the context of daily practice (Gambrill, 1990; Reid, 1997b; Klein & Bloom, 1995; Beutler, Clarkin, & Bongar, 2000; O'Hare, Tran, & Collins, 2002; A. Rosen, 2003; Thyer, 2004). Initiating and implementing assessment and intervention procedures that are not supported by research is no longer considered acceptable. Ultimately, professional decision making uses the best available evidence to guide the application of assessment, intervention, and evaluation methods.

#### THE ROLE OF CRITICAL THINKING

Practitioners must rely on good critical thinking skills to effectively apply the existing practice knowledge base for at least two reasons: First, scientific evidence does not speak for itself. Some inference and interpretation is involved in understanding and applying a professional knowledge base. Second, applying knowledge gleaned from research to individual cases and unique circumstances is not easy. Although generalizable findings from research are helpful (e.g., youthful conduct disorder is associated with future substance-abuse problems, cognitive-behavioral therapy works well with anxiety disorders), they provide probability estimates, not predictive guarantees.

All practitioners suffer from inherent limitations in clinical judgment to one degree or another. Social workers are human and therefore subject to the influence of personal life experiences, cultural background, preferred ideologies, political opinions, inadequate professional training, psychological and emotional problems, the seduction of practice fads, collegial peer pressure, money, ambition, and professional status-seeking. Some succumb to self-serving influences, (such as client exploitation for personal gratification or financial gain). But even assuming the best of intentions, practitioners should study carefully the systematic thinking errors that they should avoid (Tversky & Kahneman, 1974; Nurius & Gibson, 1990; Gambrill, 1990, 2004). These include

confusing description with inference by substituting handy labels (e.g., she's a "borderline," he's an "Axis II") for a thoughtful analysis of the person and situation (e.g., client has suffered from many chronic and stressful experiences, and has not learned effective ways to cope with these troubling feelings);

focusing on dramatic stereotypes (e.g., "she's just a lying drug abuser") rather than seeing client behavior in context (e.g., mom is trying to retain custody of children and avoid imprisonment);

overrellance on easily accessible information (e.g., an emotionally compelling case study) to make practice judgments rather than acquiring a more representative view of the problem by using relevant research;

- ascribing too much or too little importance to some data when formulating an assessment (e.g., an adverse childhood event) at the expense of other important influences (e.g., multiple chronic environmental stressors such as poverty or long-term psychological abuse);
- failing to employ accurate base rates of a problem by becoming infatuated with rare phenomena (e.g., "multiple personality disorder") rather than first considering more common explanations (e.g., feigning mental illness, drug abuse, medical disorder);
- engaging in dichotomous thinking (e.g., treatment success or failure) rather than measuring behavior on a continuum (e.g., client is now less anxious, demonstrates better communication skills, has lowered alcohol or drug consumption);
- overgeneralizing ("all traumatized women develop post-traumatic stress disorder") rather than considering individual variability and accurate base rates;
- engaging in hindsight bias to create the illusion of predictive expertise (e.g., "You should have known that client would attempt suicide!") when, in fact, predicting relatively rare events on a case-by-case basis has proven to be very difficult under the best of circumstances;
- confusing correlation (e.g., co-occurring heavy drinking and depression) with causation, rather than considering a range of causal relationships that may involve multiple factors (e.g., client drinks heavily because he is depressed, or client is depressed because he drinks heavily, or client is depressed for reasons other than drinking);
- engaging in circular reasoning (e.g., client can't remember incidents of child abuse because memories are repressed; repressed memories are an indication of childhood trauma, therefore, the client must have been sexually abused because she cannot recall the incident) versus examining multiple factors (including the possibility of trauma) and multiple sources of evidence as part of a thorough objective assessment;
- selectively attending to evidence that confirms one's theoretical or practice opinions rather than considering alternative explanations (e.g., citing only studies that appear to support one's point of view rather than conducting a representative review of the existing research);
- engaging in non sequiturs (e.g., some traditional mental health services have failed our clients; therefore, unconventional or alternative therapies will be more effective).

The implementation of evidence-based methods requires careful reasoning. Although all practitioners are susceptible to personal biases and logical fallings, employing sound assessments based on well-founded human behavior theory,

implementing evidence-based practices, and carefully monitoring and evaluating each case can go a long way to avoiding some of these pitfalls.

#### THE ETHICAL ARGUMENT FOR EBPSW

All social work practitioners, researchers, academics, and administrators should be familiar with and adhere to the NASW Code of Ethics. The code outlines the ethical duty of social workers to use and promote scientifically sound theories and practices, and engage in ethical research and evaluation activities. EBPSW not only conforms to the code, but enhances and facilitates its implementation by providing a rational framework for integrating and implementing it. The core ethical considerations for conducting both social work practice and research are quite similar (Reamer, 1995, 2000; Houston-Vega, Nuchring, & Daguio, 1997).

Three basic guidelines must be adhered to: client confidentiality, informed consent, and a mandate to do no harm as a result of intervention and evaluation activities. Confidentiality has always been one of the foremost ethical principles for social workers, and has been robustly supported in court decisions (see Jaffee v. Redmond in Appelbaum 1996) and in federal legislation, specifically the Health Insurance Portability Accountability Act of 1996. Practitioners and researchers also share the responsibility to get adequately informed consent from clients, by explaining the nature of the intervention or evaluation research project, and by indicating whether there is any potential for causing psychological distress. Practitioners and researchers are also required to be responsive should clients become distressed in the course of an intervention or research/evaluation procedure. With increasing frequency, practice and evaluation activities occur simultaneously (e.g., using clinical scales as part of assessment and clinical review procedures), often rendering the intervention vs. evaluation distinction moot for practical and ethical purposes. A sensible policy would be for social workers to concentrate on applying good ethical principles whether the professional activity is defined as practice, evaluation, research, or a combination of these.

Because few social workers engage in controlled experimental research projects with innovative or potentially controversial experimental treatments, such as drug trials or other medical research, most of the concerns about breaches of ethics, practically speaking, are relevant to social work practice activities, not to the conduct of social work survey or evaluation research. Generally, there has been an increase in malpractice claims in the past decade or so related to incorrect treatment, sexual impropriety, breaches of confidentiality, failure to diagnose correctly, client abandonment (i.e., terminating prematurely), and suicide attempts (Houston-Vega et al., 1997; Reamer, 1995). Although anyone can inadvertently breach ethical principles or be sued for malpractice, evidence-based practice can help mitigate these threats by providing a rational basis for

assessment (including identifying high-risk behaviors), guiding choice of interventions that are supported by research, and providing a sound basis for evaluating cases at both the individual and aggregate levels.

#### PRINCIPLES OF EBPSW

The working principles of EBPSW are listed below. They will be examined further in subsequent chapters.

- Social work is a profession based on values, ethics, knowledge, and skills. Value-based professional decision making requires evidence-based knowledge and skills applied to assessment, intervention guided by critical thinking, and good judgment honed by practice experience.
- 2. The knowledge base of social work is rooted in the social science disciplines. The causes of people's problems are understood to be complex and involve interacting biopsychosocial risks and resiliencies. These influences vary across time and situation, and have both remote and proximate effects on the cause and maintenance of a client's problems. Cross-sectional, longitudinal, and experimental research on human behavior and the social environment provide some understanding of the risks and resiliencies associated with client problems, and provide a foundation for valid assessment.
- 3. Although clients' views of the problem, their coping capacities, and their suggestions for potential solutions should be given the utmost consideration in professional assessment and treatment planning, practitioners are primarily responsible for formulating assessment, intervention, and evaluation plans. Funding sources, regulatory agencies, and the courts recognize licensed social workers, not their clients, as the experts and hold the social workers accountable for these activities.
- 4. Person factors such as age, gender, sexual orientation, race, ethnicity, and cultural identity interact in a complex and, sometimes, indeterminate manner. These factors are essential for developing and understanding valid human behavior theory, assessment, and practice principles.
- 5. Outcome research provides substantial guidance for practitioners when developing effective intervention strategies. Nevertheless, interventions shown to be effective in controlled studies often require flexible, eclectic adaptation for the individual client, given their preferences, circumstances, and the unpredictable events that occur during intervention.
- 6. Byidence-based practitioners have a number of evaluation research methods at their disposal. All have strengths and weaknesses based on their design. The evidence-based practitioner uses the design that best answers the evaluative question at hand.

- 7. Above all, the development, teaching, and dissemination of evidence-based practice is guided by the time-honored tradition of rational, scholarly discourse. Critical thinking and peer-reviewed methodologically sound research are the currency of ethical, professional knowledge building and debate.
- 8. The implementation of EBPSW in community service settings requires adherence to evidence-based protocol leavened with flexibility to adapt these practices to complex cases in fluid service environments.
- 9. Assessment, intervention, and evaluation processes are integrated in EBPSW for the purpose of providing compassionate and effective care. Qualitative and quantitative evaluation methodologies are combined to demonstrate and improve quality of service.
- 10. For social work to remain a vital profession well into the future, social workers must play an active role in the development, implementation, and evaluation of EBPSW.

## **CHAPTER 2**

# QUALITATIVE AND QUANTITATIVE ASSESSMENT

Assessment in psychosocial practice is a form of problem analysis. It is an attempt on the part of the practitioner, client, and other collaborators to identify what blopsychosocial factors seem to have caused and currently maintain the client's problems, to assess client capacities for adaptation and change, and to specify those aspects of the client's problems that are amenable to change. Setting goals and objectives, selecting effective intervention methods, and designing the evaluation are inextricably linked to assessment as part of the intervention planning process.

This chapter examines the research that supports evidence-based assessment. It then examines the major components for applying this knowledge; the multidimensional functional (MDF) assessment, and the adjunctive use of measurement tools. The purpose of this chapter is to provide practitioners with an integrated assessment model that uses both qualitative and quantitative methods in a coherent and practical manner to guide intervention planning and evaluation, the subjects of chapters 3 and 4.

# THE CONTEMPORARY KNOWLEDGE BASE OF MULTIDIMENSIONAL/FUNCTIONAL ASSESSMENT

A valid assessment must consider a person's unique experience and the problem specific knowledge based on research. A body of contemporary research relevant to a specific problem is most likely to be a combination of cross-sectional and longitudinal surveys, experimental research, and case-study research. The use of relevant and methodologically sound research findings supports assessment by providing base-rate estimates (incidence and prevalence) of specific problems in the community, estimating the rates of co-occurring problems, identifying key risk and resiliency factors (both developmental and current) that are likely to contribute to the client's problems or predict recovery, providing estimates for the relative strength of risk and resiliency factors, explaining the multidimensional nature of client problems, providing support for some theories

and invalidating others, and providing an empirical and theoretical foundation for instrument development.

To conduct an informed qualitative assessment, practitioners must choose a human behavior model that is relevant to the cilent's presenting problems and based on research specific to the relevant problem area (Wakefield, 1996). Currently, a wealth of problem-specific research is available to social workers to inform their practice. Highlights of research that supports the assessment of each problem area are summarized in the first parts of chapters 5-16.

Contemporary human behavior models that inform clinical assessment are multifactorial (often multitheoretical) and involve a range of developmental biopsychosocial processes mediated by a variety of individual person factors such as age, gender, race, ethnicity, and cultural background (Basic Behavioral Science Task Force, 1996). Person factors are not simply demographic categories, but represent essential characteristics that are inextricably related to biological, psychological, social-environmental, historical, cultural, and economic determinants of human experience and behavior. These factors often play an important role in the causes of human problems, in the epidemiology (prevalence and incidence) of psychosocial disorders, and in how problems are defined by the client, practitioner, or others, expressed by individuals, and treated by practitioners (Pinderhughes, 1989; Suc, Zane, & Young, 1994).

Although findings from research on white males have historically been overextended to assessment and intervention guidelines for women and people of color (Schliebner, 1994; Beckman, 1994; R.T. Carter, 1995), a rapidly expanding literature emphasizes differences associated with gender, race, and other person factors (Basic Behavioral Science Task Force, 1996). One example is the research on the impact of poverty and violence on racial minorities and their families (J. H. Williams, Stiffman, & O'Neal, 1998; Gorman-Smith & Tolan, 1998).

Although it is critical that person factors be taken into account in an assessment, overgeneralizations about women, broad ethnic-cultural groups, sexual orientation, or other differences should also be avoided (Gopaul-McNichol & Brice-Baker, 1998; Uba, 1994; Manoleas, 1996; Vasquez, 1994). For example, women of color may share a common bond in oppression, but they also manifest considerable differences between and within racial groups, Indeed, some theoreticians have suggested a more fine-grained assessment of group differences. Rather than emphasizing broad ethnic and racial glosses to describe culturally disparate peoples, for example, more fine-grained approaches may provide greater sensitivity (O'Hare & Tran, 1998; D. B. Heath, 1991; Trimble, 1990). Those assessments include identifying one's birthplace and that of other family members over two or three generations; analyzing ethnic-specific behavior patterns such as language use, ethnic identity of friends and acquaintances, use of various media, participation in ethnic-specific activities such as cultural and religious events, and music and food preferences; and exploring subjective assessments of ethnic identity, acculturation and assimilation status, value

preferences, role models and preferred reference groups, and attitudes toward "out" groups.

These differences must also be seen in a temporal or developmental context. Rather than seeing acculturation as a linear transition from immigrant culture to the host culture, it may be better measured on a bidirectional continuum. Accordingly, multiple psychological and behavioral aspects of acculturation vary between both the immigrant and host culture. Various aspects of cultural identification may be acquired, retained, or discarded to one extent or another (J. Anderson et al., 1993; Marino, Stuart, & Minas, 2000). Berry (1986) conceptualizes four possible outcomes of the acculturation process: assimilation toward the dominant culture, integration of both cultures, reaffirmation of the traditional culture, and marginalization from both cultures. Characterizing large groups of people by gender, race, sexual orientation, and the like as though they share a common characteristic is fraught with peril, and only serves to blind practitioners to the uniqueness of clients' experiences, and how their experiences shape their view of themselves and others in their own reference groups over time.

Assessment Instruments designed to be sensitive to person factors have been developed and tested with the following problems: race-related stress (Utsey & Ponterotto, 1996), language proficiency among recent immigrants (J. Anderson et al. 1993), mental health (Mollica, Wyshak, de Marneffe, Khuon, & Lavelle, 1987), and substance abuse (Saunders, Aasland, Amundsen, & Grant, 1993). Some attention has also been given to refining methodological processes for valid scale construction with people from different cultural groups (Tran, 1997).

Person factors are not confined to those that identify a client's gender, cultural background, or financial status. Other individual qualities relevant to assessment include the circumstances that brought the client to social work service (e.g., court-ordered or voluntary), and their motivation or readiness to change. These dimensions of assessment overlap with the subject of treatment engagement, and they are dealt with in chapter 3.

# THE MULTIDIMENSIONAL/FUNCTIONAL APPROACH TO ASSESSMENT

Given the assumption that valid assessment must consider both generalizable knowledge and individual experience, a comprehensive assessment must incorporate two core organizing concepts: multidimensionality and functionality (table 2.1). Both concepts are at the heart of what is defined within this text as evidence-based assessment.

Multidimensionality requires judgments about the nature and severity of the client's difficulties, judgments supported by the best available scientific knowledge specific to the client's problems. Factors, both past and present, that contribute to clients' problems are understood to interact systemically over time and across situations. Multidimensionality also implies measurement of the

TABLE 2.1 Conceptual domains of evidence-based assessment

#### Multidimensionality

Assess developmental and current causes of client difficulties and the trajectory of problems over time. Analysis is informed by valid human behavior theories;

Analyze interactional/systemic influences and behaviors over time in family and social situations;

Conduct a thorough examination of current biopsychosocial difficulties across multiple domains (e.g., mental status, relationships, work, health, etc...)

Carefully consider the role of person factors (e.g., gender, race, ethnicity, sexual orientation, spirituality, etc...) on the problems and potential solutions.

#### **Functionality**

Examine temporal sequencing and patterning of problem behaviors over time and across situations; focus on current functioning and key problems;

Measure important problems on a continuum (e.g., frequency, severity or duration) with either self-anchored indexes or dimensional scales:

Identify important contingencies, that is, rewards and punishments that appear to maintain current conditions;

Set problem priorities and develop hierarchies for achieving objectives toward resolving those problems;

Explore client's unique problem constructions and expectations toward resolving problems;

Emphasize problems that are amenable to change, changes that can be measured incrementally over time for monitoring and evaluation purposes.

client's difficulties across multiple psychosocial domains in living. Functionality is assessed primarily through understanding the client's unique experiences based on reports from multiple sources including the client, family, collaborating professionals, and other collateral sources. These concepts are collectively reflected in the work of many practice scholars who have written incidiy about assessment (see, e.g., C. Franklin & Jordan, 2003; Karls & Wandrei, 1994; Hartmann, Roper, & Bradford, 1979; Haynes, 1998; O'Hare et al., 2003; Antony & Swinson, 2000; Persons & Fresco, 1998).

Assessment is multidimensional to the extent that it has the following characteristics: (1) The practitioner's understanding of the client's general psychosocial history and specific problem history is informed by contemporary human behavior research. Human development, problems, and adaptive capacities are understood to be caused by reciprocally and systemically interacting biopsychosocial processes. (2) It considers interacting influences over time. (3) It measures current client distress across multiple domains of psychosocial functioning or well-being. These domains minimally include mental status (psychiatric symptoms), substance abuse, social functioning in immediate social relationships with partners and family and extended (community) relationships, access and use of environmental resources such as housing, gainful vocational activity,

general health status, leisure activities, criminal involvement, and sense of spiritual well-being. (4) The expression of a client's problems and life circumstances are recognized as mediated by gender, age, critural identity, and other defining characteristics referred to above as "person factors."

Although human behavior research informs assessment, it must be coupled with a unique functional analysis of the individual's day-to-day experiences. Knowledge of schizophrenia, for example, is helpful for understanding the condition of clients who share this affliction. However, all people with schizophrenia are unique in many other ways. An MDF assessment reflects functionality to the extent that it provides an in-depth analysis of the unique patterning and sequencing of clients' experiences that interact with day-to-day events in their social environment. A functional assessment is by its nature idiographic; that is, it is unique to the individual. To the extent that a functional analysis considers the client's unique cognitive experiences, it is also commensurate with a constructivist view. Thus, the practitioner and client must work collaboratively to describe, explain, understand, and, build a detailed yet hypothetical working model of the client's problems.

The functional assessment emphasizes the importance of (1) temporal sequencing and patterning of thoughts, feelings, behaviors, and social-environmental events related to the problem; (2) measuring the frequency, intensity, or duration of specific problems in order to measure changes over time; (3) identifying salient contingencies (rewards and punishments) in the environment that appear to influence the client's behavior and overall well-being; (4) setting of priorities among different problems, and establishing progressive hierarchies to gradually address individual intervention objectives; (5) paying close attention to clients' unique construction of the problem and their expectations for change; (6) giving priority to problems that are amenable to change, and defining and measuring problems in a way that is sensitive to incremental change over time in order for practitioners to conduct meaningful monitoring and evaluation of each case.

Although most assessment models emphasize work with individuals, social workers are often required to assess couples, families, and other small groups. Conducting an assessment with clients in their immediate and extended social context often has distinct advantages over relying on self-report alone. Family systems assessment, for example, encompasses both multidimensional and functional aspects. The practitioner must provide an assessment for individual members while examining the interactional and temporal patterns among family members in order to understand *how the system functions*.

#### THE ROLE OF MEASUREMENT IN MULTIDIMENSIONAL/ FUNCTIONAL ASSESSMENT

Few practitioners would doubt that the severity of problems can vary between two different clients and within the same client over time as they become worse or improve. Practitioners are called upon to make frequent judgments regarding the severity of problems for purposes of treatment planning, referral, and evaluation. How reliable and accurate are those judgments?

Although much of the judgment that goes into a skilled assessment is qualitative, judgment can be improved when practitioners also incorporate reliable, valid, and practical standardized instruments into assessment, monitoring of client progress, and evaluation. These instruments can engender increased reliability and validity for the individual practitioner's assessment; accurately identify risks and ensure that all staff cover the bases on high-risk clinical concerns; help clients identify specific complaints, clarify their definition of their problems, and educate themselves about the problem; prompt more in-depth discussion about the problem with the practitioner and thus provide an opportunity for more targeted assessment; and provide a baseline for evaluating intervention effectiveness by measuring change across one or more domains of client well-being. Used consistently and skillfully, assessment tools can provide an important foundation for monitoring and evaluation.

Client problems are measured in a number of ways: by classification (e.g., diagnosis), frequency with which the problem occurs, intensity, or duration. Types of instruments also vary by degree of complexity from simple classification and single-item indexes, to unidimensional and multidimensional scales.

Continuous measures are useful for baselining and monitoring client change over time. They can be unidimensional single-item indexes, unidimensional scales that measure one problem using multiple indicators, or multidimensional scales that measure more than one aspect of a problem. Each approach has its advantages, and often these measurement tools are used in combination. For example, a practitioner working with a middle-aged woman who has been abused in her marital relationship may incorporate the following into the MDF assessment: simple index to measure the weekly frequency of suiclidal thoughts, a unidimensional scale to measure depression or self-esteem, and a multidimensional scale to gauge her overall psychosocial well-being.

#### Diagnostic Classification

For many social workers, an assessment, by necessity, uses the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2000). The *DSM* has contributed greatly to the recognition of serious mental disorders, provides a common nomenclature for practitioners, and has stimulated and guided much clinical research. Social work practitioners should be familiar with it, and know how to use it competently.

The DSM is limited as a tool for assessment, however. First, DSM diagnosis is premised on the notion that the locus of dysfunction is within the individual. "Whatever its original cause (the disorder) must currently be considered a manifestation of a behavioral, psychological, or biological dysfunction in the individual" (DSM-IVTR, p. xxxi), an assumption that is increasingly at odds with knowledge regarding the influences of psychosocial stressors and other social-environmental factors. Second, DSM categories lack differentiation. As the

authors of the current version of the DSM opine, classification systems work best when the categories are relatively homogeneous, there are clear houndaries between them, and they are mutually exclusive. Generally, homogeneity is more the exception than the rule in DSM diagnoses, because many symptoms and behaviors are common to more than one disorder. Practitioners often compensate for this limitation by applying multiple diagnoses to the same client.

Third, aside from determining the presence of serious mental illness presumably caused, in part, by some physiological dysfunction, the DSM is misapplied, in the view of many, to conditions in which psychosocial factors play a prominent if not dominant role. Many DSM categories also appear to be merely descriptions of behaviors that are sometimes troubling to the client or, especially, others (Kutchins & Kirk, 1997; Peele, 1989; Sroufe, 1997; Wakefield, 1997). The lack of empirical evidence for biological etiology of many disorders includes diagnoses applied to children with psychosocial or behavioral difficulties (e.g., oppositional-defiant disorder; Achenbach, 1995). However, even with disorders such as severe mental illness in which biological factors have been shown to play a dominant etiological role, social and environmental factors weigh heavily in the exacerbation of symptoms, access to treatment, and long-term outcomes.

Fourth, reviews of the field trials and data related to the development of the DSM have consistently concluded that the methods employed in reliability and validity testing are seriously flawed (Kutchins & Kirk, 1988, 1997). Although a few of the major diagnostic categories have been shown to be used reliably in normal interviewing situations, the reliability of childhood and personality disorders, among others, has been shown to be quite poor.

Lastly, aside from setting rather gross treatment expectations for practitioners, diagnosis provides relatively little guidance for treatment planning and evaluation, given that clients' problems are typically multidimensional and idiographic in nature, and diagnoses lack sensitivity to change.

### Screening Devices

Screening devices in social work practice play an important role as prelude to more thorough assessment. Screening tools are scales that use a cut-off score to detect the likelihood that a client may have a particular problem. Instruments such as the Michigan Alcoholism Screening Test (Seltzer, 1971) or the Drug Abuse Screening Test (Skinner, 1982) use cut-off scores to identify people who may be at risk for a scrious substance-abuse problem. Although some screening devices cannot be used as outcome measures because (due to the wording of items or scoring method) they cannot show change over short periods (e.g., three months), others are more sensitive to change and can be employed for both screening and evaluation. For example, the Geriatric Depression Scale (Yesavage et al., 1983) can serve as a screening device with elderly clients (see chapter 9). Because it is sensitive to change, it can also be used as an assessment/evaluation tool.

Before using screening devices, practitioners should be sure that the recommended cut-off score is based on research subjects similar to the client's reference group. As with all instruments, screening devices should be validated with samples that reflect the population for whom they are intended. In addition, the results of a screening instrument should not be considered a confirmation of the problem, but simply a warning light to induce a more detailed assessment.

#### Single-Item Indexes

Sometimes clients' most pressing concerns can be summed up in a simple index: number of drinks, frequency of panic attacks, severity of arguments, level of postoperative pain, degree of intimacy, number of suicidal thoughts, level of depression, days without a meal, level of hope for recovery, and so on. Single Item indexes were originally associated with early behavioral interventions where "target" problems were the focus of treatment (Hersen, 1985; Bloom et al., 1999). For a child with severe autism, reducing repeated head banging or hair pulling may be used to judge the success of behavior modification. The intensity of flashbacks related to post-traumatic stress as measured by a client on a scale from 0, to 100 may be used to assess progress in response to stress management and guided imagery. Number of successfully completed homework assignments for a child struggling with ADHD can be logged on a brightly colored chart. When applied to more complex problems, the adjunctive use of unidimensional indicators as part of a comprehensive assessment and evaluation can help focus the intervention on key problems and provide a straightforward and substantive measure for idiographic evaluation.

Figure 2.1 provides a template for considering how to define target problems (thoughts, feelings, and behaviors) and how to measure them (frequency, intensity, and duration). For treatment planning, these indexes can also represent specific treatment objectives. How the problem or objective is defined and measured should be the result of client-practitioner discussion to maximize the salience for clients, encourage their willingness to participate, and reflect whatever seems most congruent with their situation. For example, for serious suicidal thoughts (cognition), frequency may be the main concern for one client, severity or intensity of the thoughts for another. For an assaultive adolescent, intensity of anger may be the main focus of change, rather than frequency. For the person with agoraphobia, the frequency of panic attacks may be most critical as well as the amount of time they can remain in the supermarket without "freaking out" and running outside. For a couple struggling to improve communications and intimacy, reducing the frequency of interruptions during conversations (behavior) may be their initial objective, and later, increasing the amount of recreational or romantic time spent together may become the new objective. As treatment objectives are accomplished, they can be modified to reflect improvement to focus on a different problem. When defining these indexes, careful attention should be given to the context within which the target symptom or problem occurs.

FIGURE 2.1 Template for defining and measuring target problems

	Frequency	Intensity	Duration
Cognitive			, , , , , , , , , , , , , , , , , , ,
(thoughts)			
Emotional			•
(feelings)			
Physiological			
(symptoms)			
Behavioral			
(actions)		Property Advances	

Other single item indexes measure more general levels of client functioning rather than one discrete problem. Perhaps the most commonly used is the Global Assessment of Functioning (GAF), published in the *DSM-IVTR* and derived from the original Global Assessment Scale (Endlcott, Spitzer, Fleiss, & Cohen, 1976). This index is often required as part of routine diagnosis. The GAF is scored from 1 to 100, corresponding to global descriptions of clients' functioning ranging from "persistent danger of severely hurting self or others" (1–10), to "serious symptoms [and] impairment in social, occupational, or school functioning" (41–50), to "superior functioning in a wide range of activities" (91–100). Data suggest, however, that the GAF may correlate primarily with mental status symptoms, and not be a particularly valid estimate of broader social functioning (Roy-Byrne, Dafadakis, Unutzer, & Ries, 1996; Dickerson, 1997). As an evaluation tool, the GAF may be a useful adjunct, but should be augmented with measures of social functioning.

#### Unidimensional Scales

Although unidimensional (or narrowband) scales are typically constructed with at least five items, and may range up to thirty or more, they measure only one dimension of client well-being, such as depression, anxiety, self-esteem and so forth, but do so with multiple items. Although less flexible in use than simple single-item indexes, unidimensional scales have usually been tested for reliability and validity. Notable examples include the Beck Depression Inventory (Beck et

al., 1961), the Hamilton Depression Rating Scale (Hamilton, 1960), the Obsessive-Compulsive Inventory (Foa, Kozak, Sałkovskis, Coles, & Amir, 1998), and the Index of Marital Relations (Hudson, 1982a), although unidimensional scales can be a valuable adjunct to a comprehensive assessment, they are limited in focus. They can be used in specialized intervention settings (e.g., depression or anxiety clinic) or as a supplement to multidimensional (or broadband) instruments.

#### **Multidimensional Scales**

One remedy for dealing with a "jumbled array" (Hudson & McMurty, 1997) of single-measure scales is to employ multidimensional instruments that measure a number of important areas of psychosocial well-being. Multidimensional measures provide a quantitative counterpart to the multidimensional qualitative assessment. Such an assessment package can focus on the individual while providing a foundation for aggregating data for program evaluation: Reliable and valid instruments have been developed to measure clients' functioning across an array of psychiatric, psychosocial, and health-related domains (Dickerson, 1997; Srebnik et al., 1997). Many scales designed to balance reliability, validity, and utility will be highlighted throughout this text.

Although some practitioners might question the reason for measuring problems other than those "target problems" for which the client requested treatment, most intervention models in mental health, substance abuse, child welfare, and elderly services now require the measurement of multidimensional outcomes. For this purpose, there are a number of broadband scales developed for assessment and evaluation. Practitioners must choose those that best fit their assessment and evaluation needs.

The Psychosocial Well-Being Scale (PSWS; O'Hare, Sherrer et al., 2002; O'Hare et al., 2003) is an example of a broad-spectrum instrument. It was developed as a comprehensive yet easy-to-use debriefing tool or final "score card" to quantitatively summarize clinical judgments regarding problem severity on a range of important psychosocial domains. Clinicians are encouraged to use a broad array of sources (e.g., client self-report, clinical records, input from significant others and collaborating professionals) before making a final judgment about problem severity. Because the PSWS was developed for adults in a comprehensive community mental health center, it may have wide applicability.

The twelve items that make up the PSWS are rated by the practitioner on a five-point scale (see appendix A). They cover the following problem domains: Two four-item subscales include psychological well-being (cognitive mental status, emotional mental status, impulse control, and coping skills), and social well-being (immediate social network, extended social network, recreational activities, and living environment). The four items in each subscale can be totaled and divided by four to obtain a relative measure of severity. In addition, there are four single-item indexes, global measures of substance abuse, health, activities of daily

living and work satisfaction. These four items can be used as stand alone indexes. The PSWS has been shown to have good reliability and validity in that its subscales have correlated well with other valid scales (O'Hare, Sherrer et al., 2002; O'Hare et al., 2003). No population norms are set for the PSWS, and the items are intended to be self-anchored. Thus, the PSWS is best used as part of a comprehensive strategy of assessment, monitoring, and evaluation that incorporates the observations and judgments of client, practitioner, and other corroborating sources. After scoring each item on the scale, practitioners should briefly describe the client's specific problem in the lines provided. In this way, the PSWS serves as both a quantitative and qualitative assessment/outcome instrument. The PSWS is available in appendix A and can be used without obtaining special permission from the author.

Broad-based scales for assessing children's disorders are also available. The Child Behavior Check List (CBCL; Achenbach, 1995; Lowe, 1998), a widely used and well-regarded multidimensional functioning scale, measures both social competence and behavior problems in children. Different versions have been developed for use by parents, teachers, and children themselves, and it has been validated by gender and race. The CBCL-is proprietary, and requires special permission from its author (Thomas Achenbach) to use it.

The Shortform Assessment for Children (SAC; Glisson, Hemmelgarn, & Post, 2002; Hemmelgarn, Glisson, & Sharp, 2003) is a viable alternative to the CBCL. The SAC is a brief and reliable broadband scale that measures both internalizing (depression, anxiety) and externalizing (behavioral problems) in children. The SAC is a recent addition to a series of scales developed with the support of the National Institute of Mental Health (NIMH) from behavioral items created in the 1940s and 1950s (E. H. Tyson & Glisson, 2005). With a sample of 3,790 children (ages 5-18) served by the child welfare and juvenile justice systems, the SAC produced stable factor structures across age, gender, and respondent groups (i.e., parents and teachers; Glisson et al.). Internal consistency reliability coefficients ranged between .86 and .96 for all groups using either parents or teachers as respondents, and subscales showed significant correlations with child placement decisions and other validity criteria. NIMH funded a subsequent study with a new sample to determine if the same short list of behavioral items included in the SAC could be used with equal validity by parents and teachers (Hemmelgarn et al.). Validity coefficients were equivalent for parents and teachers, and externalizing scores showed good criterion validity for fighting, placement ejections, and time in custody. Furthermore, an additional independent sample of 1,252 children produced factor structures and validities that indicated the SAC to be equally valid with African-American and Caucasian-American children (E. H. Tyson & Glisson). The SAC can be completed by parents, teachers, or prefembly both. The one-page scale has forty-eight items (twenty-four internalizing, twentyfour externalizing), and takes only a few minutes to complete. Each item is rated on a three-point scale (never, sometimes, often). Scores for both internalizing and externalizing dimensions are obtained by summing the twenty-four respective items, and a global score combines both subscales scores. The SAC is accompanied by software-based scoring guidelines normal for the child's age, gender, and respondent, A copy of the SAC appears in appendix B.

Other broadband scales are available to accommodate a range of assessment needs. The Family Adaptability and Cohesion Evaluation Scales (FACES), currently in its fourth revision, measures levels of cohesiveness and flexibility in family functioning (Olsen, Russell, & Sprenkle 1989; C. Franklin, Streeter, & Springer, 2001). It was developed from a systems perspective, and the scale is intended to be self-administered. The instrument may be obtained from David Olsen at the University of Minnesota, Department of Family Social Sciences. The Addiction Severity Index (McLellan, Luborsky, Woody, & O'Brien, 1980) measures degree of distress from alcohol and drug use across a number of problem domains, including legal, medical, family, social, and occupational functioning (see chapter 6). The Social Functioning Scale was developed to measure both general health and social functioning and is available from John Ware (New England Medical Center, Boston) without cost in a twelve-item version (Ware, Kosinski, & Keller, 1996). A. F. Lehman's Quality of Life Scale (1988) measures seven areas, including living situation, family and social relations, leisure, work and religious activity, finances, safety, and health. It is available from Anthony Lehman (University of Maryland) for a nominal cost. All of these instruments have been shown to be reliable and valid to one degree or another with specific populations, provide continuous measures to gauge treatment progress, and can usually be completed within an hone.

#### **Basic Guidelines for Instrument Selection**

A number of basic criteria should be considered before selecting and using a scale (O'Hare, Sherrer et al., 2002).

It measures multiple dimensions of client well-being on continuous scales.

It is part of the typical qualitative psychosocial and psychiatric assessment required in community programs.

It is relevant to the treatment agenda of all members of an interdisciplinary team.

It facilitates treatment planning by providing a template for measuring treatment goals and outcomes.

It works as a summary assessment/evaluation instrument to synthesize data accumulated from numerous, interdisciplinary sources.

It is reliable, valid, and relatively easy to use after some training.

Its scoring methods have immediate face validity for practitioners (i.e., no complicated or cumbersome scoring guidelines).

It produces scores (both individual items and aggregate scores) that have straightforward resonance with clients, practitioners, administrators, and policymakers.

Reliability and validity constitute the core psychometric criteria that must be considered when developing or choosing any quantitative evaluation instrument (Kaadin, 1994a; DeVellis, 2000). It should have face validity and be considered by both practitioners and clients to be relevant to the clients' overall problems. It should have a track record of research supporting its internal consistency reliability (items of the scale show good interitem correlation), test-retest reliability (scale is consistent when filled out at two different intervals), and interrater reliability (two observers who use the same scale with the same client show a high degree of agreement). Instruments should ideally meet criteria for three forms of validity: construct validity (the scale measures what it purports to measure), criterion validity (it correlates with similar measures concurrently and predicts relevant outcomes), and content validity (it includes a reasonably representative array of relevant items). Although ideally a scale should meet all of these standards, most published scales are considered acceptable if they meet at least one or two forms of reliability and show both construct validity and some form of criterion validity with relevant target populations.

A variety of statistical methods are used to demonstrate the degree of reliability and validity. For reliability measures, scores above .70 indicate adequate reliability, above .80 good, and above .90 excellent. Validity of scales is indicated by moderate to high correlations (>.50) between the scale score and another valid benchmark, or a lower correlation (<.50) to indicate discriminant validity. The construct validity of scales involves a more detailed analysis of the underlying factor structure, and requires advanced statistical techniques, known as exploratory and confirmatory factor analysis, to demonstrate that the scale items individually and collectively actually measure the theoretical construct of interest (such as anxiety, psychopathy, or alcoholism). In addition, these psychometrics should be demonstrated in the research literature with community and clinical samples reasonably similar to the clients with whom the practitioner intends to use the scale. Lastly, instruments intended to be used for monitoring and evaluation purposes should be sensitive to change in the client's target symptoms or overall well-being. Some scales may be useful as screening devices, but may not be sultable for use as evaluation tools because they are not sensitive to changes in problem severity. Although practitioners should be familiar with the basic concepts of reliability and validity, experts in instrument development and selection can provide helpful consultation.

## , Methods for Gathering Assessment Information

Qualitative and quantitative assessment information can be obtained in several ways, and, to some degree, the methods employed depend upon the situation. For the most part, social workers depend upon client self-report in *face-to-face interviews*, which may range from relatively unstructured to standardized formats. To obtain a more complete picture of the client's situation as well as en-

suring accurate self-report practitioners may also need to obtain collateral or corroborating information, such as police records, physician exams, hospital records, and employer's report of job performance. Other methods include observing clients in their natural environment asking clients to role-play a problem situation, and requesting clients to self-monitor their thoughts, feeings, and behaviors in different circumstances for a week or two in order to develop a better working model of the problem. All of these assessment activities may include the collection of qualitative data, quantitative data, or preferably both.

Practitioner judgment is required to decide how to obtain the most accurate and representative information in order to conduct the optimal MDF assessment. In some instances, client self-report may be sufficiently valid if there appear to be no memory problems or compelling motive for misrepresenting the truth. When clients have cognitive impairments, or are likely to minimize a problem or lie, practitioners should obtain corroborating information. Given that effective intervention is in part contingent upon an accurate assessment, practitioners should be assertive about obtaining an accurate, through, and balanced view of the client's problems.

In the final analysis, assessment is both art and science, inductive and deductive, idiographic and nomothetic. Assessment is the thoughtful application of generalizable knowledge in the service of understanding a client's unique experience.

#### SUMMARY

MDF assessment in evidence-based practice is defined by the following characteristics: It is informed by current biopsychosocial research regarding risks and resiliencies related to clients' dysfunctions and strengths across multiple domains of well-being. It requires a systemic and functional analysis of client's problems within interactional social contexts, measuring the severity of problems across multiple psychosocial domains. The client's difficulties are also viewed in the context of person factors. MDF assessment incorporates clients' personal account of their difficulties as well as detailed idiographic functional analysis of their experiences to help understand the sequencing and patterning of factors related to the clients' present efforts to cope in their environment. It emphasizes the use of both idiographic and standardized dimensional scales to define specific problems in a way that is amenable to measuring change. Whenever possible data are collected with multiple qualitative and quantitative methods employed with multiple sources.

MDF assessment lends itself to intervention planning because problems are defined dimensionally on a continuum to reflect changes in client well-being across multiple problem domains. It also is well-suited to practice evaluation, because it can be accommodated to evaluate interventions for one client, groups of clients, or entire programs.

### CHAPTER 3

# SELECTING AND IMPLEMENTING INTERVENTIONS

This chapter addresses the selection and implementation of evidence-based practices. It defines the intervention in BBPSW and identifies essential practice components. It addresses the debate over flexibility and manualization. A brief overview presents current finding in controlled outcome research. The chapter also summarizes basic guidelines for critically reviewing outcome studies, a key step in selecting evidence-based practices.

#### DEFINING INTERVENTIONS IN EBPSW

Interventions in evidence-based practice are activities engaged in by the practitioner, the client, and perhaps other collaborators for the purpose of solving specific problems, enhancing clients' psychological and behavioral coping abilities and modifying social-environmental contingencies to improve a client's psychosocial well-being. If intervention is the overarching term, skills are the most elemental component, and strategies or techniques are combinations of skills that constitute the intervention. It has long been understood that social work interventions often comprise various combinations of both basic and advanced skills, techniques, and strategies (Shulman, 1992; Hepworth, Rooney, & Larsen, 1997; B. R. Compton & Galaway, 1999). Novice social workers may initially focus on learning a few discrete basic skills, specific behavioral techniques, or case management methods.

Advanced evidence-based interventions, however, are combinations of skills and techniques that have been shown to be efficacious in controlled outcome studies with more serious and complex psychosocial problems. These interventions may include psychoeducation and behavioral family therapy for the mentally ill, community reinforcement and contingency management for paroled inmates chronically addicted to street drugs, interpersonal psychotherapy for depressed clients, exposure with response prevention for people with obsessive-compulsive disorder, cognitive-behavioral intervention for bulimia nervosa, dialectical behavior therapy for borderline personality disorder, and behavioral family therapy for conduct-disordered and delinquent adolescents. In addition,

more difficult and complex problems often require the collaboration of multiple adjunctive practitioners (e.g., psychiatrist, school social worker, teacher, and coaches for work with a child with severe ADHD) as a part of broad-based approaches. Thus, many advanced interventions must be skillfully applied within a broader case management framework. Interventions that are sufficient to resolve mild to moderate psychosocial problems are considered basic whereas those required to ameliorate moderate-to-severe and more complex problems are considered advanced.

#### THE ESSENTIAL SKILLS OF ERPSW

It is difficult to define the actual skills and interventions employed by the practitioner without implying some intended response or change process in the client. Skills, techniques and strategies (collectively, the intervention) are terms that emphasize what the practitioners do. Change processes, however, are primarlly psychological and emotional changes in the client that facilitate attainment of therapeutic goals. For example, a practitioner employs good listening and empathy skills with a mentally ill client, and as a result, the client responds with feelings of trust toward the practitioner and a degree of optimism that the practitioner will be helpful. The practitioner then uses cognitive techniques to help the client identify a consistent pattern of "expecting the worst" in social encounters, and with further discussion, the client reacts by remembering that, sometimes, social encounters in the past have gone well. The practitioner then role-plays with the client to practice asking someone out on a date. The client gains confidence that they just might be able to attempt it. These examples highlight the use of basic relationship-building skills, challenging dysfunctional bellefs, and rehearsing a change in behavior. Research on practice processes has demonstrated that many different practice methods, despite theoretical differences, share these and other "common processes" (Goldfried, 1980, 1995; Grencavage & Norcross, 1990; Orlinsky & Howard, 1986; Walborn, 1996; O'Hare, Collins, & Walsh, 1998; O'Hare, Tran, & Collins, 2002). These findings provide the basis for theoretical integration and practice eclecticism, two somewhat overlapping concepts relevant to EBPSW that will be addressed later in this chapter,

Although the common-processes approach implies that client change processes and intervention skills are overlapping constructs, the emphasis in BBPSW is clearly on the eclectic application of intervention skills, techniques, and interventions. Observable activities by the practitioner and client that collectively make up the intervention can be more readily defined than can underlying theoretical change processes. The pragmatic reason for emphasizing observable skills and interventions is so that practice methods can be more readily researched, taught, and evaluated. Based on reviews of both process and outcome research, practice skills can be subsumed under three major categories: supportive and facilitative skills; therapeutic coping skills, which include cognitive change techniques and behavior change techniques; and case

management skills, which are essential for helping clients cope with social-environmental risks and barriers as well as for coordinating complex intervention plans (Lambert & Bergin, 1994; Orlinsky & Howard, 1986; Orlinsky, Grawe, & Parks, 1994; O'Hare et al., 1998; O'Hare Sherrer et al., 2002).

It is evident from both the process and outcome research literature that effective practices usually comprise some combination of intervention skills. The case for an eclectic, empirically based social work model that incorporates the use of the full range of psychotherapeutic and case management skills drawn from multidisciplinary sources is now stronger than ever. Controlled practice research has produced an eclectic, multidisciplinary amalgam of supportive/facilitative, therapeutic coping skills and case management strategies that collectively have come to represent BBPSW (J. Fischer, 1973, 1981, 1993; K. Wood, 1978; O'Hare, 1991; G. MacDonald, Sheldon, & Gillespie, 1992; Reid, 1997a, 1997b; O'Hare, Tran, & Collins, 2002).

Although not specifically considered part of the actual intervention, structural elements of treatment should be noted here because they define important parameters that affect service delivery. Structural elements include the programmatic context of care (e.g., Inpatient, community agency, private practice); associated policies; bureaucratic, fiscal, and contractual conditions; the working contract with the client; and treatment planning and evaluation methods that may be incorporated into care (Orlinsky & Howard, 1986; K. Wood, 1978; B. R. Compton & Galaway, 1999; O'Hare, 1991; K. B. Wells, Astrachan, Tischler, & Unutzer, 1995).

Interacting structural and practice dimensions of effective care have been highlighted through research on brief treatments (Budman & Gurman, 1988; Eckert, 1993; Koss & Butcher, 1986; Koss & Shiang, 1994) and through exhaustive reviews of the clinical process and outcome research (Orlinsky et al., 1994; Lambert & Bergin, 1994). For example, despite the uncritical endorsement, by some, for employing long-term psychotherapy for moderate psychosocial conditions, mental health outpatient interventions with mild to moderate disorders have historically been relatively brief (average six to eight visits) in both public and private intervention settings (Koss & Shlang, 1994). Cost-effectiveness research suggests that programmers move beyond the simplistic short-versus long-term dichotomy, however, and emphasize developing optimal formats for type, frequency, and duration of the intervention based on clients' changing needs. Flexibility may prove to be a sensible approach leading to more ethical cost-effective care (K.B. Wells et al., 1995). Effective brief interventions are characterized by using evidence-based interventions, a sound collaborative working relationship, promptness in offering service, goal-oriented treatment planning, flexibility in scheduling visits, and using evaluation tools to monitor progress.

Cost-effectiveness research has already had profound effects on service policy. Although practitioners tend to assume that cost-effectiveness research uniformly endorses cuts in the amount of treatment, the evidence often supports more long-term care, varying the frequency and intensity in delivery of services.

Cost-effectiveness research is likely to continue to focus on identifying optimal service-delivery methods that are both effective and sensitive to cost. For example, although programs for assertive community treatment (PACT) have been shown to help reduce hospitalization among the mentally ill, the amount of service from which each client may benefit varies considerably. Rather than a use-it-or-lose-it approach to mental health program financing, evidence-based approaches should base the amount of care on need and the extent to which the client is likely to benefit (Essock, Frisman, & Kontos, 1998). Whether major service providers and managed-care organizations can move toward employing the best evidence in a cost-effective manner when defining "best practices" remains to be seen.

## Supportive and Facilitative Skills

Supportive and facilitative skills include putting the client at ease; employing basic listening and communication skills; engendering trust; communicating empathy, genuineness, and positive regard; enhancing clients' confidence and morale and stimulating clients' motivation to engage in the intervention. Dimensions of the therapeutic relationship have been researched extensively in the counseling, psychotherapy, and social work literature for many years (e.g., C. Rogers, 1951; Barrett-Leonard, 1962; Truax & Carkhuff, 1967; Horvath & Greenberg, 1989; Duan & Hill, 1996; O'Hare, Tran, & Collins, 2002). Practitioners from different schools of thought may disagree about the nature of the relationship, the theoretical differences regarding the inferred change processes, and the associated therapeutic techniques employed. For example, theoretical explanations regarding how the working relationship affects change include the inherent curative effects of the human encounter, the collaborative problem-solving aspects of the relationship, and the creation of a psychological environment that facilitates the reexperiencing of childhood unconscious conflict. Although theoretical opinions vary regarding how the relationship helps, process and outcome research strongly supports the quality of supportive and facilitative skills as an essential dimension of effective psychosocial practice.

The therapeutic relationship provides other opportunities for change as well. Although social work practitioners have long been exhorted to "begin where the client is," only recently have practice researchers focused on the influence of clients' motivation and readiness to change. To underscore their importance, supportive and facilitative skills have taken on increased relevance as part of the growing interest in strategies that focus on motivating and engaging clients in the change process (W. R. Miller & Rollnick, 1991; Prochaska, Di-Clemente, & Norcross, 1992; O'Hare, 1996a). An empirical stage model of change has been developed by Prochaska and colleagues (Prochaska & Di-Clemente, 1984; Prochaska et al., 1992; McConnaughy, DiClemente, Prochaska, & Velicer, 1989) and stipulates five stages of change: precontemplation, when clients do not agree that they have a problem, may see others as the cause of

their difficulties, or may feel coerced into treatment by the courts or significant others; contemplation, when a client is aware of a problem and may want to find out whether therapy can help; preparation, when the client is taking initial steps toward change; action, when a client may take more significant steps toward working on the problem and seek help in the change process; and maintenance, when clients have already made changes with regard to a problem and have sought treatment to consolidate previous improvements. Clients may cycle through these stages of change. A person with an addiction, for example, may consider change many times before taking action, and may relapse numerous times before stabilizing (Diclemente & Hughes, 1990). The stages of change model has been employed with a range of problems, including smoking cessation, substance abuse, and other mental health and health-related problems.

If stages of change suggest when clients are ready, motivational enhancement methods suggest how to help clients engage in the change process. Readiness to change is particularly relevant for working with clients who are more or less coerced into receiving social work services, and are often labeled by practitioners as resistant, hard to reach, hostile, and unmotivated (H. Goldstein, 1986; Rooney, 1992; W. R. Miller & Rollnick, 1991). The dichotomy of voluntary and involuntary is far from absolute, however. The findings of one investigation clearly demonstrated a tendency for voluntary clients to express much more engagement in the change process, but did not support the common generalization that all court-ordered clients are incapable or unwilling to change (O'Hare 1996b). Many involuntary clients can be engaged successfully through the skillful use of a number of strategies, such as accepting their initial reluctance, avoiding premature confrontation, clarifying one's dual role within the social service and criminal justice systems, providing some sense of control and choice in selecting treatment objectives and methods, avoiding overemphasis on irrelevant selfdisclosure, anticipating obstacles to treatment compliance, employing behavioral contracting, involving significant others when at all possible, and actively enhancing motivation (Behroozi, 1992; Rooney, 1992; McIchenbaum & Turk 1987; W. R. Miller & Rollnick, 1991).

Although the supportive and facilitative skills are an essential dimension of effective intervention, they are also considered insufficient for establishing lasting change with more challenging psychosocial conditions (Lambert & Bergin, 1994). For more robust interventions, expert therapeutic cognitive and behavior coping skills are necessary.

# Therapeutic Coping Skills

Empirically supported interventions that emphasize coping skills are used in every kind of contemporary cognitive-behavioral practice. Therapeutic coping skills are practitioner activities that help the client, the couple, or the family develop more effective ways of coping with psychosocial and environmental challenges. These skills may be initially promoted and taught by the practitioner, but

it is an explicit goal of the intervention that clients will practice and incorporate them into their daily coping repertoire. Growth in understanding the interaction of cognitive, physiological, behavioral, and environmental elements of human experience has been largely driven by social-cognitive theory (Bandura, 1986), the foundation for cognitive-behavioral interventions (L. W. Craighead, Craighead, Kazdin, & Mahoney, 1994; Dobson & Craig, 1996). These skills and interventions are usually combined into an overall strategy, and implementation is guided by outcome research and tailored to clients' needs and treatment expectations. These skills include self-monitoring, psychoeducation, changing dysfunctional thinking, interpretation, behavioral coping, problem solving, contingency management, and stress management.

Self-monitoring techniques are self-assessment skills that clients use to learn about their problems and track progress in coping with them. This skill is highly flexible, can use qualitative (e.g., diaries) and quantitative (e.g., weekly charts) data collection, and should be crafted to precisely reflect the client's unique needs. Self-monitoring can be used to identify occurrences of psychological, physical, behavioral, interpersonal, or situational events that seem relevant to the cause or maintenance of the client's problem. Emphasis is placed on honing the client's skills in self-assessment by tracking the frequency, intensity, or duration of the problem, and by conducting a functional assessment that notes patterns, sequences, and psychosocial cues associated with the reoccurrence of the problem. These skills may include identifying triggers for substanceabuse relapse, anticipating events that provoke trauma-related flashbacks, learning to detect and recognize anger as a prelude to practicing constructive social responses, and identifying cues that trigger a child's obsessive-compulsive behaviors. Self-monitoring skills are key to connecting functional assessment with practice monitoring and evaluation. It thus combines assessment, intervention, and evaluation.

Psychoeducation can provide factual information to help inform clients about the nature of their problem and ways to cope. Often a preliminary and important component of intervention, psychoeducation can take many beneficial forms: to reduce self-blame in the families of people with severe mental illness; as a brief intervention for problem drinkers where feedback on medical and behavioral consequences is emphasized; as a basis for educating and reassuring anxiety-disordered clients that they are not "going to die" or "go erazy" as a result of their disorder; or to teach basic parenting skills to an overwhelmed, young, single mother. Psychoeducation, as with many of these skills, can be either a part of a multifaceted intervention or a stand-alone intervention.

Challenging and changing dysfunctional thinking has also become a prominent strategy for helping clients improve coping skills. Effective practice often operates on the assumption that client's difficulties are sometimes grounded in erroneous, distorted, or dysfunctional beliefs and thought processes regarding themselves, others, the world, and the future. Negative schemata can promote negative automatic thoughts and, subsequently lead to systematic

thinking errors and poor coping abilities. It is essential to try to understand clients' unique view of themselves, others, and their world, challenge those views, and encourage creativity and resourcefulness in finding solutions. These techniques are also referred to in the practice literature as cognitive restructuring.

Helping clients learn from past experiences through interpretation, traditionally an approach associated with psychodynamic therapy, has come to be seen as a relatively generic aspect of other effective therapies as well (Lambert & Bergin, 1994; E. E. Jones & Pulos, 1993; Safran, 1998). Cognitive change is often focused on client's interpersonal relationships. In addition to providing support and facilitating change, the therapeutic alliance can serve as a proxy relationship for clarifying cognitive distortions regarding interpersonal conflict (past or present).

Practitioners can help clients clarify and disconfirm these interpersonal misattributions by examining the meaning of the interpersonal distortion or conflict, and then experientially testing the client's inferences. For example, if a young woman has been emotionally abused by important people in her life and continues to find herself in emotionally abusive relationships as an adult, it would be very helpful for her to identify what characteristics she looks for in an intimate relationship and reexamine those criteria. If these interpersonal distortions lead to repeated conflict though her misinterpretation of others' behaviors, testing her expectations may lead to "behavioral disconfirmation" of some of her more negative and distorted beliefs ("he is controlling and abusive because he really loves me," or "if I respond to his abuse with love, I know I can really change him!"). Behaviorally disconfirming these beliefs may lead to lasting change.

However, insight means more than understanding how past relationships affeet current problems. Insight happens when clients make better cause-effect connections among their thoughts, feelings, behaviors, and interpersonal relations (past and present), and relate how these factors cause and maintain the problem (Cautela, 1993). An infinite array of "ahal" connections can constitute insight: when a client realizes that her excessive social drinking is exacerbating her depression and marital conflict; when an ambitious and overly competitive man realizes that his personal career is causing marital strain and alienation from his children; when a young mentally ill woman realizes that working part-time has given her a sense of accomplishment, and being around others has made her less afraid and mistrustful; when a young adolescent realizes that her mother's controlling behavior has more to do with her own anxieties than with her daughter's trustworthiness or lack of maturity; when a young couple realizes that their mistrust is based on prior failed relationships, and that frequent, open and honest communication diminishes mistrust. Although theories about how insight occurs may differ, most practitioners challenge clients to change the way they think about their own and others' behaviors, and help their clients understand the nature of their persistent difficulties in living, Obviously, insight can come in many forms, and coming to some understanding of the problem is sometimes a prelude to behavior change. In fact, insight may not occur primar-

ily through verbal discussion of cognitive distortions and processes, but through behavior change that disconfirms distorted expectations (G.T. Wilson, 1995).

Once a good therapeutic alliance is established and the client has questioned some of her basic assumptions and beliefs about her problems, behavtoral coping skills can help the client test those dysfunctional beliefs and establish more effective coping skills that may lead to Jasting change (Thorpe & Olson, 1997; L. W. Craighead et al., 1994; Dobson & Craig, 1996). For many conditions, such as mental illness, addictions, marital and family problems, child abuse and neglect, and health-related disorders, behavioral coping skills and strategies have come to be seen as essential for competent social work practice, and are no longer dismissed as adjunctive means for enhancing "deep" therapy. These skills and techniques include modeling, communication and problem solving, role-playing and rehearsal, graduated exposure (i.e., graduated practice) of new behaviors in the "real world," and ongoing practice. Graduated exposure and ongoing practice in the client's own environment is the key to enacting intervention success, because without it there is little chance of generalizing the client's new skills across situations or maintaining therapeutic gains over time.

Problem-solving skills are often embedded in evidence-based intervention packages for both adults and children. Although there are slight variations on these models (e.g., D'Zurrilla & Goldfried, 1971; Meichenbaum, 1974), problem solving generally includes recognizing, exploring, and defining the problem; generating alternative solutions and developing a plan; anticipating consequences and obstacles to problem resolution; and performing, monitoring, and evaluating the problem-solving plan.

Contingency management techniques are also an essential component of many effective interventions. Implementing reinforcement procedures to reduce problem behaviors and increase adaptive and prosocial behaviors are an essential skill for many serious conditions, including self-regulation of health-risk behaviors, parenting skills to help children with internalizing and externalizing disorders, couples counseling, behavioral family interventions with adolescents, and social-skills training with the mentally Ill and people with serious developmental disabilities. In addition, contingency management techniques have come to be seen as an essential component of interventions for court ordered and other involuntary clients. Outcome research should be referenced to help decide how and in what combination behavioral skills can be optimally used before applying them in practice. As will be seen in subsequent chapters, the empirical literature abounds in behavioral-skills methods (now most often packaged as cognitive-behavioral interventions). These are recognized as essential components of effective interventions for adults, children, and their families, spanning a wide spectrum of serious psychosocial disorders.

Therapeutic coping skills also include techniques for regulating physiological and emotional distress. These include various types of stress-management tools, including progressive muscle relaxation (Jacobsen, 1938), breathing and meditation techniques (Benson, 1975), and systematic desensitization (Wolpe, 1958, 1973) often accompanied by creative use of imagery to help clients confront their fears. Anxlety has long been a key concept in psychosocial theories, and the goal of regulating anxiety is common to most psychosocial change methods. Anxiety-reduction skills are also employed as part of successful interventions for the treatment of high blood pressure and pain control (Blanchard, 1994; Blechman & Brownell, 1998). Stress-management skills can be used alone for some clients, but are often part of an overall intervention package for more serious and complex disorders. They can be applied with unlimited creativity to accommodate client needs, preferences, and capabilities.

Although therapeutic coping skills can be used individually, they are typically used in combination as part of an overall cognitive behavioral intervention designed to deal with more challenging psychosocial problems. For example, a young man with schizophrenia may learn to self-monitor delusional symptoms, engage in behaviors to disconfirm these frightening thoughts, participate in behavioral family therapy, and practice social skills in the community. A person suffering from agoraphobia will first establish control over anxiety symptoms through relaxation methods and imaginal exposure (i.e., gradually approaching the feared situation in her mind's eye), and then gradually spend increasing amounts of time outdoors or in a specific situation until the anxiety dissipates and her range of activities increases. Couples who argue destructively may work on basic communication skills, and then focus on clarifying interpersonal distortions that may have generalized from previous relationships. A single mom with a rebellious teenage son might benefit from learning better communication and negotiating skills, and setting better limits through the use of contingency management (l.c., rewards and sanctions). People with chronic addictions may learn to self-monitor triggers, use imagery to focus on negative consequences of use, and learn alternatives for dealing with negative or painful feelings that could precipitate relapse. How these therapeutic coping skills are combined as effective intervention methods will become increasingly evident in subsequent chapters.

## Case Management Skills

Although many psychosocial difficulties can be effectively addressed through supportive, cognitive, and behavioral coping skills, these methods are often not robust enough to overcome the environmental pressures; and barriers that weigh down many of our clients (O'Hare, 1996b; Bouton, 2000; Hopps, Pinderhughes, & Shankar, 1995). Practitioners are remiss when they place disproportionate emphasis on psychological causes of clients' problems or focus solely on clients need to change. Evidence for the impact of social-environmental pressures such as homelessness, poverty, and discrimination on the psychological well-being of individuals is compelling (Dohrenwend, 1998; Avison & Gotlib, 1994; Moos & Moos, 1992). Although large-scale political and socioeconomic change may not be the primary target of the clinical or direct-practice social

worker, evidence-based interventions demand a thorough assessment of socialenvironmental factors that affect the client directly. Some of these barriers and problems may be amenable to direct influence, or the client may be able to cope with them more effectively. If nothing else, an accurate and thorough assessment of social-environmental factors, even those beyond the client's direct influence, can provide an opportunity for psychoeducation, a reduction in self-blame, and a more realistic intervention plan that emphasizes the problems that are amenable to change.

Case management skills include an array of social work strategies that enhance client functioning through the coordination of complex interventions and improvement of access to other social, material, and environmental resources (Hopp et al., 1995; Woods & Hollis, 1990; Shulman, 1992; Rothman, 1991; Veeder, 2002). This role often requires a broad scope of knowledge concerning comprehensive assessment and treatment needs as well as a good degree of professional initiative, leadership, and communication skills to make interdisciplinary services and bureaucratic systems work in concert for clients. Beyond mere brokering of services, case management skills have come to be seen as essential for coordinating multiple services and enhancing instrumental and social supports with a range of problems, including mental illness (Mueser, Bond, Drake, & Resnick, 1998), child abuse and neglect (R. E. Lewis, Walton, & Fraser, 1995), conduct-disordered adolescents (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998), and criminally involved people who abuse alcohol and other drugs (S.T. Higgins et al., 1993).

Enhancing social supports is one critical goal of case management. The quality of social supports is associated with a number of factors, including a sense of self-efficacy and personal empowerment (Gutierrez, 1990; Sarason, Pierce, & Sarason, 1994). Social supports can be either naturally occurring or orchestrated as part of formal social work interventions (Streeter & Franklin, 1992). They may include contact and emotional support from others and instrumental support, in the shape of concrete and tangible goods and services (Richey, 1994; Sarason et al., 1994). Social supports should also be understood both structurally (connections, networks, relations with different groups such as family, co-workers, and other social organizations) and functionally (availability, accessibility, and satisfaction with support received). Enhancing social supports may take many forms, such as encouraging clients to try out mutual-help groups like Alcoholics Anonymous (Humphreys, 1999), facilitating the development of a consumer group for people with mental illness (Heinssen, Levendusky, & Hunter, 1995), and providing social supports to buffer the stressful effects of grief on the elderly (Fitzpatrick, 1998). Practitioners may have to help clients optimize the potential benefits from social supports by helping them improve their social skills (Richey, 1994).

Case management methods have often been treated as a poor relative to psychotherapeutic skills, perhaps because using these skills is often associated with less attractive clients or less prestigious practice settings. For evidence-based practitioners, it is understood that failing to provide effective coordination of services or ignoring social and environmental needs may preclude solid long-term outcomes with even the most skillfully delivered intervention. Case management skills, when used judiciously and assertively, can often be the most powerful agent of stable change.

#### GUIDELINES WITH FLEXIBILITY

How the core skills and techniques of evidence-based practices are combined, configured, and implemented in routine service is currently the focus of considerable debate. The major helping professions have only begun to struggle with transferring psychosocial interventions shown to be efficacious in controlled trials into everyday practice. Two debates regarding implementation of evidence-based practices are considered here: manualization versus flexibility, and theoretical integration versus practice eelecticism.

## Manualization versus Flexibility

The "manualization" of treatments derives largely from controlled practice research. Opinions vary regarding the use of treatment manuals to guide interventions (Mitchell, 2001; Kirk, 1999).

Some practitioners resist any perceived mandate to use interventions that are not congruent with their own preferred approaches, feel that this movement is a challenge to their professional autonomy, and consider manualization to be little more than a cost-control strategy of managed-care organizations. Some practitioners see that interventions for some mild conditions are often responsive to different approaches, and conclude that choice of intervention really does not matter. Because *DSM* classifications drive outcome research, manualized interventions are designed for rather narrow clinical disorders. Social workers often address more complex psychosocial disorders, and clients' problems, therapists' styles, and situational factors often preclude strict adherence to manualized approaches (Garfield, 1996).

Proponents of manualization respond to these criticisms by pointing out that clinician preferences should not drive treatment selection, as there is no evidence that experience or "practice wisdom" alone is a sound basis for professional decision-making. Far from being cost-control measures, many manualized guidelines are at odds with managed-care recommendations and call for two to four times the number of sessions typically authorized by managed-care utilization review boards (J. R. Weisz & Hawley, 1998). Another point is that, although basic counseling skills may be sufficient for many mild transitory problems in-living, research demonstrates differential outcomes among intervention methods with more serious psychosocial disorders.

Although diagnosis driven practice guidelines are artificially narrow, there is now a growing recognition that considerable flexibility is needed to apply interventions optimally in everyday practice. This flexibility may be accommodated through advances in practice integration (i.e., reconciling underlying common change-processes, as noted above) and practice eclecticism (Garfield, 1996; Beutler, 1999; Scaturo, 2001; Reid, 1997b; O'Hare et al., 1998). The evidence-based practitioner should first learn effective interventions by the book and then adapt them to complex psychosocial problems with judgment, flexibility, and keen attention to the client's unique treatment expectations, goals, and circumstances. Although evidence for guiding flexibility in practice is currently sparse, practitioners should employ monitoring and evaluation methods to make incremental adjustments during the course of the intervention.

Initial investigations suggest that manualized care has been well-received by clients (Mitchell, 2001). Evidence also suggests that interventions conducted within the context of controlled investigations may often be quite comparable to "real" treatment conditions (M. B. Franklin, Abramowitz, Kozak, Levitt, & Foa, 2000). Manuals that guide research on and teaching of clinical practice can go a long way toward providing social work practitioners with the necessary expertise for intervening with serious psychosocial problems, and can reduce excessive variation in applying effective practices (G.T. Wilson, 1996).

## Theoretical Integration versus Practice Eclecticism

Given that a variety of manualized intervention methods share a range of common skills and techniques, practitioners, in addition to specializing in one or two key manualized methods, should focus on learning core clinical skills that can be adapted to a range of client problems. The developments in theoretical integrations and practice eclecticism have illuminated many of these common processes and skills, and provide some guidance for improving the practical utility and transferability of manualized interventions.

Although integration and eclecticism are sometimes used interchangeably, they emphasize different aspects of theory and practice. Integrationists (e.g., Goldfried, 1980, 1995; Wachtel, 1977, 1987) are primarily concerned with reconciling theoretical explanations about how psychosocial interventions engender and facilitate change processes within the client or between the client and others (change-process theory). Thus, change processes are not the intervention skill itself, but are inferred cause-effect psychosocial processes that occur within the context of an intervention. (Human change processes can be studied outside the context of psychosocial interventions as well.) Change-process theory addresses questions at the very heart of practice theory and research. Research has identified a number of change processes common to different treatment approaches, such as the healing qualities of the interpersonal relationship (C. Rogers, 1951; Raskin & Rogers, 1995); insight and corrective reexperiencing to counter psychological harm associated with prior relationships (Brandel & Perlman, 1997; Ackerman, 1966; Scharff, 1995; J. Welss, 1995; Henry, Strupp, Schacht, & Gaston, 1994; Henry, 1996); disconfirming dysfunctional thinking and

increasing self-efficacy through behavior change (Bandura, 1986; G. T. Wilson, 1995); facilitating change in family structural and systemic processes (Nichols & Schwartz, 1995); and facilitating creative and spontaneous problem-solving activities through narrative, constructivist, solution-oriented, paradoxical, and strength-based approaches (Haley, 1976; Madanes, 1981; Saleeby, 1996; DeShazer, 1985; Granvold, 1996). Practice integrationists see theoretical common ground among the different practice models, and attempt to devise intervention strategies that optimally capitalize on them. Even where research has clearly demonstrated the efficacy of an intervention for certain psychosocial problems, however, little definitive evidence supports specific or unique underlying change processes as being the catalyst of change. This indeterminacy in the findings of change-process research extends to the treatment of depression (Oel & Shuttlewood, 1996), post-traumatic stress disorder (Tarrier, Sommerfield, Pilgrim, & Faragher, 2000), eating disorders (G.T.Wilson & Fairburn, 1993), and substance abuse (Mattson, 1994), among other problems.

While integrationists argue for common theoretical change processes, proponents of evidence-based eclecticism emphasize the optimal configurations of skills, techniques, and intervention strategies that are most likely to help clients solve problems, improve coping skills, and enhance psychosocial well-being. To clarify the difference between change processes and interventions, consider the following examples: if insight is the change process, interpretation would be the intervention; if altering dysfunctional thinking is change process, then Socratic questioning and behavioral disconfirmation (i.e., testing one's beliefs) are the interventions; if shifting power dynamics in a family is the change process, directed role-playing and practicing better communication skills among family members may help to achieve it; if feeling validated is an important change process, then empathic listening and communicating unconditional positive regard is the intervention; if a corrective emotional experience is the change process, then providing a good working alliance through empathic listening and a collaborative attitude is the intervention.

Change processes and practitioner skills are closely rated, but specific change processes and interventions are not necessarily linked in any unique combination. Different intervention strategies may activate the same change process, or an intervention may activate different change processes in different clients, or activate different change processes within the same client at different times over the course of the intervention. Obtaining insight, for example, may occur as a result of either verbal interpretation, behavioral practice, environmental changes, some combination of these, or some unknown serendipitous event. Perhaps the most obvious way of distinguishing change processes from psychosocial interventions is to point out that psychosocial changes occur in people all the time in the natural environment. The question for practitioners is whether they can effectively activate these change processes for the good of the client on a consistent basis through the use of formal psychosocial interventions. Thus, it is the actual intervention, not the inferred change process, that is the main focus of outcome research and practice evaluations in EBPSW.

Evidence-based practitioners give the highest priority to the use of existing outcome research to guide the choice and implementation of intervention, but employ flexibility to provide the optimal configuration of skills and interventions to accommodate the client's unique needs, expectations, and circumstances. Two of the better-known examples of formal eclectic models in psychotherapy practice include Arnold Lazarus's multimodal approach (1981, 1997) in which he uses a multidimensional assessment model (BASIC ID behavior, affect, sensation, imagery, cognition, interpersonal, drugs); and Beutler and Clarkin's systematic eclectic psychotherapy (1990), which attempts to tailor the intervention by using empirically guided considerations of patient's predisposing factors, relationship factors, treatment factors, and context. Both approaches rely first on empirical literature to guide treatment planning, but endorse considerable flexibility and judgment in dealing with specific cases. EBPSW incorporates the findings and strategies of eclectic psychotherapy, but adds case management skills to the mix to address more severe and complex psychosocial disorders than those typically addressed in psychotherapy practices.

# A BRIEF OVERVIEW OF THE CURRENT FINDINGS OF OUTCOME RESEARCH

Up to this point, the discussion of EBPSW has focused mostly on specific skills, the essential components of effective interventions, and a rationale for flexibly combining them. Although articulating these skills is necessary in order to provide the practitioner with building blocks, or the ingredients to be ectectic, evidence-based practices are primarily delineated through studies demonstrating how combinations of these skills are efficaciously applied to serious psychosocial disorders. By necessity, these developments are the result of contributions from multiple disciplines, including social work, and are applied with clients in fields of practice where social workers have made substantial contributions; mental health, substance abuse, child abuse and neglect, and forensic services, among others.

Outcome research relevant to social work (I.e., psychotherapy, casework, psychosocial rehabilitation, and case management research) did not begin in earnest until after Eysenck (1952) in psychology and J. Fischer (1973) in social work posed the challenge to the helping professions to demonstrate the effectiveness of psychosocial interventions. By the early 1980s, a substantial body of clinical outcome research had emerged (Lambert, Shapiro, & Bergin, 1986). Traditional scholarly reviews (e.g., Luborsky, Singer, & Luborsky, 1975) and later meta-analytic reviews (e.g., M. L. Smith, Glass, & Miller, 1980) of the clinical research demonstrated the overall effectiveness of psychotherapy interventions. Reviews of the literature in social work, reported mixed results. (J. Fischer, 1973, 1981; K. Wood, 1978; Reid & Hanrahan, 1982; Rubin, 1985). Studies of outpatient treatment problems revealed comparable results for insight and behavior therapies (Sioan, Staples, Cristol, Yorkston, & Whipple, 1975; Lambert et al., 1986), but behavior therapies demonstrated superior outcomes with more serious

disorders in both adults (Kazdin & Wilson, 1980) and children (J. R. Welsz, Welss, Alicke, & Klotz, 1987). Positive findings for cognitive behavior approaches continued to grow through the 1990s (Lambert & Bergin, 1994; Reid, 1997; Nathan & Gorman, 1998; J. R. Weisz, Donenberg, Han, & Weiss, 1995, B. Weiss, Catron, Harris, & Phung, 1999), and are often combined with case management skills for treating the most challenging client groups.

The most efficacious practices, in general, are more likely to be delivered effectively within the context of a competent and compassionate therapeutic alliance. In addition, psychosocial interventions for complex problems are more likely to be successful if delivered within a broader case management or multisystemic framework in collaboration with other professionals, in order to maintain psychosocial improvements over time and generalize results across different situations. Evidence supporting evidence-based practices for these problems (and more) will be examined in greater detailed in parts 2 and 3. What follows is a brief list of the outcome research that supports interventions for common and serious psychosocial interventions. The sources by no means list all the published research.

Cognitive behavior approaches have been effectively implemented within a case management framework for helping people with severe and persistent mental illness (A. R. Lehman, Steinwachs, & Co-investigators of the PORT Project, 1998; Huxley, Rendall, & Sederer, 2000).

Interpersonal psychotherapy and cognitive-behavioral interventions have been shown to be comparably effective with depression (Weissman, Markowitz, & Kierman, 2000) and binge-eating disorder (G.T.Wilson & Fairburn, 1993; Shekter-Wolfson, Woodside, & Lackstrom, 1997; McIntosh, Bullk, McKenzie, Luty, & Jordan, 2000).

Cognitive-behavioral interventions have demonstrated clear superiority for serious anxiety disorders, including obsessive-compulsive disorders (Steketee, 1993; Abramowitz, Brigidl, & Roche, 2001), agoraphobia and panic attacks (Anthony & Swinson, 2999), and post-traumatic stress disorder (Rothbaum, Meadows, Resick, & Foy, 2000).

Cognitive behavioral interventions have been shown to be effective with substance abuse and dependence (W. R. Miller, Meyers, & Hiller-Sturmhofel, 1999) and a positive addition to twelve step approaches (Humphreys, 1999; US-DHHS, 2000).

Cognitive-behavioral methods are very promising when incorporated into brief early intervention strategies with youthful substance abusers (Borsari & Carey, 2000).

Cognitive-behavioral interventions have been successfully applied to chronic adult behavioral disorders, including borderline personality disorder (Linehan, 1993a, 1993b; B. B. Simpson et al., 1998) and court-ordered offenders (McGuire & Hatcher, 2001), including those with chronic and severe drug addiction (S.T. Higgins et al., 1993; Abbott, Weller, Delaney, & Moore, 1998).

Emotion-focused therapy (Johnson & Greenberg, 1995), behavioral couples therapy (C. Thomas & Corcoran, 2001) and to a lesser extent insight-oriented

couples therapy (Snyder, Wills, & Grady-Fletcher, 1991) have been shown to be effective for couples.

A large and growing body of research supports a range of cognitive-behavioral therapies for both internalizing and externalizing childhood and adolescent disorders (Kazdin & Weisz, 1998; Silverman & Berman; 2001; Farmer, Compton, Burns, & Robertson, 2002).

Cognitive behavioral approaches for children's disorders are now increasingly implemented within the context of behaviorally oriented family therapies (S. N. Compton, Burns, Egger, & Robertson, 2002; Northey, Wells, Silverman, & Bailey, 2003). They are often incorporated into ecological and multisystemic frameworks to deal with complex and serious behavior problems such as youthful delinquency (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998).

Although there have been serious methodological problems with much of the research on child-abuse and neglect interventions, some interventions have been shown to be more effective than others, particularly those that incorporate parenting skills and behavioral family therapies to prevent and reduce child abuse and neglect (Smokowski & Wodarski, 1996; Kazdin & Weisz, 1998; Lutzker, Bieglow, Doctor, Gershater, & Greene; 1998).

#### REVIEWING OUTCOME RESEARCH

Although reviews of the outcome research in journal articles and a growing array of texts on evidence-based practices are available to students and practitioners, social workers should be prepared to critically review outcome research themselves in order to stay abreast of state-of-the-art practices. This skill uses basic research methodology to access data bases through digital library resources and ability to distinguish true outcome research from marketing ploys. Although authors differ somewhat on the level of methodological rigor that should be employed in determining efficacy and effectiveness (see, e.g., Kazdin & Kendall, 1998; Chambiess & Hollon, 1998; Thyer, 2001), the guidelines below should be considered minimal considerations when judging the quality of outcome studies. Their order reflects the organization of a journal research article. Some of the design terminology referred to below will be examined in chapter 4.

For an original research article, the literature review should be representative of the current available research and cover a range of refereed journals from social work, clinical psychology, psychiatry, marriage and family publications, as well as other relevant specialty journals. Review articles, which critically review and summarize previously published research, should cover all the available evidence.

The purpose of the study should be made clear. Is it an examination of the predictive validity of client, clinician, or practice processes, or does it primarily test the effectiveness of a specific treatment approach?

The author should clearly define client descriptors (e.g., age, sex, ethnicity), sources of referral, and diagnostic and other formal selection criteria. Client

If the article is a controlled outcome study, clients should be randomly assigned to treatment conditions or specifically matched to different interventions on a number of variables, such as age, gender, or problem severity. The intervention should be compared with some alternative treatment (or no treatment). Replication of controlled studies by independent research groups substantially strengthens an argument for efficacy. If the evaluation study has no control or comparison group, statistical controls can be used to help identify client and treatment factors that predict outcomes. Although these designs are not as strong, such studies are valuable because they sometimes reflect everyday practice conditions (effectiveness) more realistically than do some controlled investigations.

Single-subject designs, particularly ABAB and multiple baselines designs (described in chapter 4), may provide strong support for treatment efficacy if they are replicated on at least three study participants. Again, replication by other researchers strengthens the argument for efficacy.

If the study is testing the linkage between specific intervention components and client outcomes, clear linkage must be established between the intervention component and changes in client functioning in one or more areas. If the study is an investigation of theoretical change processes that are hypothesized to be activated by a specific intervention, a clear theoretical rational must be defined before casual inferences can be made regarding the effect of a specific intervention component on client outcomes. Demonstrating how the treatment works is much more difficult than demonstrating that the intervention does work.

The investigators should employ at least one standardized scale (preferably more) with a history of adequate validity and reliability for the subject population. Simple indexes with clear face validity (e.g., number of panic attacks or days in the hospital) are also useful. Measures should ideally focus on target problems and on broader measures of psychosocial well-being.

What practitioners and clients actually do should be clearly described. Vague references made to perspectives, orientations, or practice theories are not good enough. Treatment manuals, evidence of close supervision, adequacy of therapists' training in the specific interventions employed, and use of fidelity measures (scales that demonstrate the faithful implementation of the model; see chapter 4) are a plus.

, Outcome data should include baseline measures, and additional measures taken at regular intervals that make sense given the duration of the program, at termination, and at follow-up at a reasonable time after service ends.

Discussion should examine methodological flaws as well as alternative explanations for outcomes. To argue that results can be generalized beyond the study participants, evidence that the intervention methods can be transferred and implemented in typical community service settings after some training of staff is essential.

#### SUMMARY

Effective social work interventions are likely to be defined by some optimal amalgam of supportive and facilitative skills, therapeutic coping skills, and case management strategies. Practitioners should initially consult the published outcome research and available clinical manuals and texts describing a method, obtain adequate training and supervision in the use of the method, and be prepared to apply the interventions with cautious flexibility within an eclectic practice framework.

### CHAPTER 4

# EVALUATING INTERVENTIONS AND PROGRAMS

Interventions shown to be efficacious in controlled trials may not be implemented effectively due to a number of factors, including lack of training in specific practices, poor transfer of training, lack of funds for professional staff development, organizational structures and processes that militate against the implementation of evidence-based practices, and inadequate supervision. Evaluation is thus a key part of EBPSW. This chapter examines a number of evaluation designs to determine their relative strengths, weaknesses, and suitability for ensuring the effective implementation of evidence-based practices. The emphasis is on the use of naturalistic monitoring and evaluation methods that are integrated at both the individual practice and program levels. The chapter ends with a description of the complete service plan, from assessment to evaluation.

# DESIGNS USED IN EVIDENCE-BASED PRACTICE RESEARCH AND EVALUATION

Social workers and allied professionals have been trying to bridge the gap between practice and research for some time. Many practice scholars have engaged in spirited debate regarding what the "best" evaluation design is, and whether qualitative or quantitative methods are superior. Before proceeding with an examination of the roles of different research and evaluation designs relevant to social work practice, some basic clarification is required.

As noted in chapter 1, practice research and practice evaluation have two somewhat overlapping purposes. Practice research tests whether interventions work under controlled conditions (to demonstrate efficacy), and practice evaluation is used to test whether interventions work under everyday practice conditions (to demonstrate effectiveness; Hargreaves, Shumway, Hu, & Cuffel, 1998; O'Hare, 2002). Now, this distinction is not always very neat. Some well-designed outcome studies can closely replicate "real-world" treatment conditions, and evaluation designs can range from naturalistic evaluation, where few efforts are made to control or manipulate treatment conditions, to controlled evaluation research. Thus, the differences between controlled outcome research and

naturalistic evaluation may best be understood on a continuum from a high level of control of client and intervention variables to no controls. Controlled evaluation research is somewhere in the middle of the continuum. This gradation of control applies to both single subject and group designs, and both qualitative and quantitative data can be used to measure outcomes in any design (although qualitative data becomes somewhat unwieldy with larger groups of clients). This continuum of control roughly corresponds to the classic distinctions among "preexperimental," quasiexperimental, and "experimental" designs (see table 4.1).

Distinguishing controlled outcome research, evaluative research, and naturalistic monitoring and evaluation is a matter of degree, and it is a distinction that should become increasingly blurred as agency-based evaluation improves in methodological quality. However, in addition to pragmatic considerations (cost, feasibility of the design, purpose of the research or evaluation project), the differences among the different research and evaluation designs can be explained as differences in balancing internal and external threats to validity.

The many potential sources of error should prevent practitioners and evaluators from being supremely confident in assuming that their positive treatment outcomes are the direct result of the intervention. These threats to drawing valid conclusions are problems of *internal validity*. One has to consider whether the

TABLE 4.1 Evaluation and outcome research designs

High control	Moderate control	Low control
Efficacy		Effectiveness
Experimental design	· Quasi-experimental design	Preexperimental design
Controlled outcome stud- ics (either groups of	Evaluation research  Clients may be selected or matched across two different approaches, or two programs are compared and statistical controls are used to determine treatment effectiveness.  Outcome measures are used.	Naturalistic program eval- uation.
clients or single-subject). Clients are carefully selected.		Monitoring a single case, using qualitative or quantitative methods to measure outcomes.  No design or statistical controls used.
Practitioners are trained		
to the treatment manual, Clients are matched or randomly assigned to the experimental and compar- ison (control) groups.		
In single-subject studies, clients serve as their own control.		
Multiple outcome measures are used.		

intervention was implemented faithfully (treatment fidelity), whether the client would have improved with no treatment or some alternative intervention, whether other factors such as the client's history, maturational, or other external factors played a role, whether "good" clients are being self-selected by the practitioner-evaluator, whether there were problems in using the instruments to collect data, and whether statistical analysis (when data are aggregated) was done correctly.

Practitioners should also be concerned with how well the intervention will replicate in similar practice environments with other client groups. These ambiguities are caused by threats to external validity. For many reasons, one cannot assume that a successful intervention with one person or even a whole program can be successfully exported to other situations. As noted earlier, practitioners often feel that interventions shown to be effective in well-controlled outcome studies don't seem to fit their own practice situation. This transition from efficacy studies to effectiveness gets to the heart of generalization, that is, external validity. What is certain is that all approaches to evaluation research have their share of strengths and weaknesses, as well as their place in the seamless continuum of reasoned inquiry into matters of practice efficacy and effectiveness.

The commonalties and shared purposes of clinical social work practice and evaluation methods have long been recognized (Siegel, 1984; O'Hare, 1991; K. Corcoran & Gingerich, 1994; K. Cocoran, Gingerich, & Briggs, 2001). Both activities require that clients and practitioners make judgments about the nature of the client's problem, determine what kind of intervention should be used, measure whether the client's problems are improving, and whether the intervention had anything to do with the outcome. Although it may seem to some practitioners that drawing conclusions about the effectiveness of their practice with a specific case should be relatively straightforward, such conclusions can often be misleading. In addition, when one has to answer the same question regarding 10; 100, or 1000 clients in a program, evaluation becomes even more challenging. Nevertheless, practitioners and evaluators must begin in the same place: define the problem, define the intervention, and establish some criteria and a method for judging success. What follows is a review of the more common designs used in evaluation and outcome research, and their relative strengths and weaknesses in providing sound answers to matters of efficacy and effectiveness.

#### QUALITATIVE APPROACHES

Qualitative evaluation employs an array of observational data-collection techniques and methods of analysis to obtain detailed, highly textured descriptions of human behavior, including making cause-effect inferences about the efficacy of social work practice interventions. Qualitative methods have long been commensurate with traditional methods of social science. They similarly require review of the existing literature and sampling strategies, and often include quantitative data collection. Qualitative researchers investigating social work practice may employ focus groups, in-depth interviews, case studies, and structured or

semistructured questionnaires. Qualitative methods provide nuance, detail, and exploratory flexibility not usually obtainable with experimental or most large-sample survey methods. Although there is often a heavier emphasis on thick description in qualitative case studies, this approach also requires making cause effect linkages between interventions and outcomes, based on one's observations. Case studies are a unique complement to experimental research, often spawning innovative assessment or intervention hypotheses. Qualitative methods are good for studying rare phenomena, can provide some degree of disconfirmation of a prevailing theory or claims of practice effectiveness (through counterinstance), and have persuasive and motivational value (Kazdin, 1998; C. Matshali & Rossman, 1995).

In response to the romanticizing of qualitative methods in social work literature (Heineman-Pieper, 1985; K. B. Tyson, 1992), some authors have high-lighted considerable liabilities in the use of qualitative methods (Gambrill, 1995; Mulien, 1995; Stake, 1995). Qualitative inquiry is highly susceptible to personal bias. The tendency to force-fit observations to one's preferred theories provides a weak basis for drawing conclusions, often raises more questions than it answers, is extremely labor intensive, and yields few generalizable results, resulting in relatively little overall contribution to the social science knowledge base. Drawing cause-effect conclusions from qualitative research or evaluation requires extreme caution, and often begs alternative explanations. Nevertheless, qualitative evaluation can provide excellent detailed idiographic (naturalistic) analysis of unique cases, and is an essential beginning point for developing a more systematic evaluation protocol.

Although qualitative research can be highly controlled, qualitative evaluation is typically used in uncontrolled designs to assist practitioners in evaluating their own practice (i.e., the standard case study). However, conclusions about treatment effectiveness from single-case analyses should be taken with a grain of salt. Observing that the client has improved, stayed about the same, or deteriorated since the initial assessment is the main function of monitoring and simply tells us how the client is doing. Given the limitations of qualitative evaluation with single cases, drawing the conclusion that the intervention was the primary cause of client change should be done cautiously.

#### SINGLE-SYSTEM DESIGNS

Single-system design (also called single-subject, n=1) in social work practice generally refers to evaluation of an intervention with a client or a family. In single-system design, the baseline measure is typically represented as A (which provides a measure of current performance and a criterion against which one predicts change in the client's problem), and the intervention is represented as B (G, and D, etc., for multiple interventions). Although single-system designs are typically used for uncontrolled (naturalist) monitoring of cases, some are referred to as "experimental" because the underlying logic of control is similar to that of classic group experimental designs: the design compares intervention

effects under different treatment conditions, and the client serves as his own control. Variations on experimental single-system designs include withdrawal and reintroduction of the intervention (ABAB design, called the reversal design), introduction of an alternative intervention (ABAC), and combinations of interventions (ABCA). Obviously, many other design variations are possible (Kazdin, 1978, 1992; Hersen, 1985; Bloom et al., 1999).

Given that the baseline constitutes the criteria against which the success of treatment is judged, a stable baseline (with several observations) is preferred, because an improving baseline makes it more difficult to argue that a successful outcome was the result of the intervention and not just the result of spontaneous improvement or other nontreatment factors. The new level of performance provides a new baseline for future changes in the treatment condition. Treatment can be withdrawn to see if performance deviates from the predicted level under treatment, or to see if the original baseline would have continued. Baselining is often done retrospectively when collecting baseline data and withholding the intervention is either impractical or unethical. In actual practice, intervention withdrawal can happen spontaneously, as clients sometimes unexpectedly drop out of treatment and return at a later date.

There are a number of benefits to employing n=1 methodology. First, simple designs are relatively easy to implement as a monitoring and evaluation tool. Second, single-system designs are quite flexible and can be designed to fit unique practice situations. Third, they provide some degree of structure for treatment planning by necessitating clear definitions of problems, interventions, and goals. Fourth, clients often see the utility of evaluation and are willing to use self-monitoring devices to baseline their problems and track their own progress. Defining a particular problem becomes a self-monitoring tool in addition to providing baseline data for tracking progress and outcomes. Although (as with qualitative evaluation) conclusions about the effectiveness of the intervention with a single case should be made cautiously, replication with similar cases using controlled experimental single-system designs can provide some basis for generalization regarding the efficacy of an innovative intervention method.

Methodological problems with single-system designs can be formidable, however (Kazdin, 1978; Bloom et al., 1999). These include several threats to internal validity. Obtaining stable baselines is often impractical. Altering phases or conditions during intervention can cause ambiguity in the interpretation of outcomes. Clients often do not improve in linear, incremental fashion, but take two steps forward, one step back. It is difficult to attribute changes in the client to specific interventions when multiple interventions are employed (ABCA). And cause effect reasoning can be confounded by "history" or "carry-over effects" because clients' recollections of previous events affect their future behavior (Wakefield & Kirk, 1995).

Originally employed to evaluate behavior-modification methods with the most severely disordered populations, single-system design is less useful with more-complex cognitively based or eclectic interventions because it is more difficult to link client improvements to specific treatment methods or different

phases of treatment. In addition, aside from naturalistic monitoring and evaluation in which no treatment conditions are altered, it is unrealistic to expect busy practitioners to employ well-planned single-system designs in everyday practice, and it is unethical to manipulate treatment conditions without clients' informed consent. Every case subjected to a new design would have to be approved by an institutional review board . . . a prospect that is not likely to be welcomed by busy administrators. Unless the administrative permissions were expedited, clients would have to wait, perhaps unnecessarily, for the intervention to commence. Perhaps the most serious problem with single-system designs is that they can be applied to only a handful of cases at one time, and generalizing results to other clients or treatment situations is impractical. The question is, beyond simple monitoring and evaluation, what can be inferred about the effectiveness of the intervention? Some social work commentators have suggested that social work go beyond the limitations of idlographic evaluation and emphasize program evaluation instead (Benbenishty, 1996).

Others have argued that n = 1 evaluation has advantages over group designs because, first, problems and interventions can be more specifically defined for the individual client, and second, making causal linkages between interventions and outcomes appears to be more straightforward (Bloom et al., 1999; Ivanoff, Blythe, & Briar, 1987; Mattaini, 1996). Ambiguity in defining the intervention is not an inherent weakness of group designs, however, and making causal connections between treatment and outcomes is certainly no easier in single-system design than in group designs. The use of treatment manuals and intervention process measures can capture many of the salient dimensions of the intervention in group designs, and group designs can provide a stronger basis for inferring causality between intervention and outcome along with a stronger case for generalization. In addition, the use of single-system designs without reference to treatment selection presents a more fundamental dilemma for social work practitioners; what criteria do we use to guide our choice of intervention in the first place? In summary, single-system designs provide a sound basis for routine monitoring and evaluation and, when used as a controlled experimental design with several cases, serve as a valuable tool for investigating the efficacy of innovative treatments, an important first step on the path to controlled outcome research.

#### GROUP DESIGNS

Controlled group designs are not typically employed in the routine evaluation of social work interventions, but constitute a methodological gold standard for conducting efficacy studies. More advanced group designs (randomized experimental designs) do a good job of controlling for internal threats to validity, although generalizing to everyday practice environments must be done with caution. In group designs, relationships among intervention and outcome variables are examined in a number of configurations (Kazdin, 1994a, 1998; Campbell & Stanley, 1963; Royse, Thyer, Padgett, & Logan, 2001). These strategies include larger

numbers of clients (at least ten under each condition, although more is preferable) and may compare the experimental treatment to intervention (control group) or an alternative intervention (comparison group, often treatment as usual in the community). The basic models of group designs are considered here.

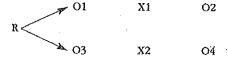
The elements of experimental design include the initial observation (O1) of the client's difficulties, the intervention (X), and a subsequent measure of the client's problem (O2) to determine some degree of change. If only these basic elements are employed with no comparison or control group, this design is a preexperimental or prepost design. As noted in table 4.1, this design reflects a low level of control. The model conceptually can be portrayed as

This design illustrates the basic components of controlled research but is itself a weak argument for drawing conclusions regarding the efficacy of the intervention, because there is no basis for comparison (clients could improve for reasons other than the intervention).

A typical quasi-experimental design compares the original intervention to some alternative treatment.

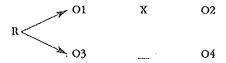
This design provides a stronger basis for inferring treatment efficacy or effectiveness than the first design, because of the presence of a comparison group. But it is still difficult to draw firm conclusions. How clients are assigned to the different groups also matters considerably. If clients chose their own treatment condition (perhaps by seeking help in two different mental health agencies, X1 and X2), then the design would be considered quasi-experimental. The weakness in this design, of course, is that little consideration is given to the impact of differences in the agencies themselves of the effect of clients' treatment expectations or other factors (such as socioeconomic status or location) that may have influenced their decision to select one agency over another. This model reflects a moderate degree of control, although alterations in the design could strengthen the level of control (e.g., matching clients in both groups on selected demographic variables through client selection or through statistical controls).

If clients are randomly assigned to these different treatment conditions, however, the design becomes experimental, and can be depicted as



The R represents random assignment to these two groups. Purists might contend that the above design is still quasi-experimental. The classic experimental design

compares the effects of one intervention with a "placebo" or no intervention at all (usually a waiting-list control group), and would be illustrated as



The \_\_ represents the control group.

One way to strengthen this design would be to collect follow-up data to see how stable the changes are over three to six months or more. With that addition, the previous model would like



Although not foolproof, random assignment tends to reduce the likelihood that outcomes would be affected by client differences such as client-selection factors or treatment expectations rather than the effects of the intervention.

Experimental designs can become increasingly complex. For example, researchers may decide to measure two variations of an experimental treatment with a comparison or control group. To maintain the experimental quality, cases would have to be randomly assigned to three treatment groups. If researchers wanted to compare the effects of treatment on equal numbers of men and women across all three groups, the participants would also have to be randomly assigned to both treatment groups and the "treatment as usual" comparison or control group. When specific client or practitioner factors are controlled for, these are referred to as factorial designs.

Controlled comparisons have the potential to provide robust evidence to support whether an intervention is efficacious. Depending on design complexity, they can also account for the role of client and practitioner factors, the effects of individual treatment components, and interactions among these factors. They have other advantages as well: pretesting allows for better client matching and accounts for different pretest performance levels among clients; data allow for measures of change both within and between the treatment groups; and controlled studies can control for the effects of attrition. Controlled experimental designs can make a strong case for treatment efficacy when clients are well-thosen, practitioners are well-trained, and the instruments employed are reliable and valid. Results can also be sufficiently robust to justify the claim of superiority of one treatment over the alternative treatment or control group, particularly if several similar studies replicate these findings.

These approaches are not without limitations, however. Drawing conclusions about the relationship between the interventions and changes in clients'

problems can still be difficult due to a number of threats to validity (Kazdin, 1994a). There may be variations and inconsistencies in the way the interventions were provided; disproportionate or excessive attrition, aspects of the intervention that are unaccounted for in the design; unintentional cues that the participants in the experimental group were getting the "better" intervention; low statistical power; and use of instruments that have poor reliability, validity, or sensitivity to change. Perhaps one of the most difficult problems is in generalizing the results of controlled trails to real practice situations. Despite the limitations, however, replicated controlled trails provide the strongest basis for establishing intervention efficacy, and provide the foundation for intervention planning in EBPSW.

# NATURALISTIC PROGRAM EVALUATION

Although controlled designs provide valuable guidelines for choice of intervention, they are rarely used as a method of routine evaluation in human service agencies, due to their exacting requirements. One strategy for evaluating whether evidence-based practices are implemented effectively accommodates the demands of day to-day agency practice. This approach is naturalistic evaluation (also known as passive-observational designs; Kazdin, 1998; Hargreaves et al., 1998; Rossi & Freeman, 1993).

Naturalistic evaluation strategies can accommodate the classic organizational model that integrates agency structure, service processes, and client outcomes (Donabedian, 1980; Salzer, Nixon, Schut, Karver, & Bickman, 1997). Structurally, programs should be well-designed, with a clear organizational mission and goals that support the administration, training, implementation, supervision, and evaluation of evidence-based interventions. Naturalistic designs employ assessment and evaluation methods that can be readily integrated into normal clinical and administrative functions of human service agencies. As the term naturalistic implies, no extraordinary means (such as random assignment, or control groups) are used to manipulate the treatment conditions: Agencies function as usual in terms of general service delivery, but great emphasis is placed upon developing quality programming based on careful reviews of the relevant practice outcome literature; training staff in best practices; and integrating the use of brief, reliable, and valid measures into assessment and evaluation procedures to capture pretest, posttest, and (in sampled cases) follow-up data over time. These data collectively link client characteristics, elements of the Intervention, outcomes, and (with increasing emphasis) service costs in one coherent model (Salzer et al., 1997; Newman, Howard, Windle, & Hohmann, 1994; O'Harc et al., 1998; Lyons, J. S. Howard, O'Mahoney, & Lish, 1997; G. R. Smith, Fischer, Nordquist, Mosicy, & Ledbetter, 1997). Meaningful and useful reports can then be designed to enhance administrative decision making and respond to accountability expectations of insurers, funding agencies, and quality-assurance organizations.

Although the ideal scenario for developing such systems would be to start from scratch, evidence-based practices and evaluation procedures can be implemented at any time, often in fluid and contentious service environments. Achieving a reasonable measure of both practicality and scientific validity is a constant balancing act when conducting program evaluation. The intervals for data collection during the intervention and at some follow-up period will vary based on the treatment environment. For outpatient mental health programs that provide brief interventions of generally less than eight visits, data may be collected at baseline, termination, and (with sampled clients) at three-month follow-up as indicated in the paradigm O1 X O2 ... O3). For a program that serves people with severe mental illness, the design would likely require repeated measures over longer periods during which different components of intervention are offered: OI X1 X2 O2 O3 X3 O4 and so on. In addition to basic univariate data reports (l.e., baseline and outcome data periodically reported for groups of clients), more sophisticated statistical techniques should be provided by expert consultants to examine the relationships among several types of variables, including client characteristics, intervention type, frequency of visits, service cost, and client outcomes.

Because naturalistic evaluation is based on the preexperimental paradigm, there are inherent threats to validity. Nevertheless, selection and development of key measures can strengthen the design. A data-collection package should minimally include key client characteristics; brief, reliable, and valid assessment and outcome measurers that are sensitive to detecting changes in client functioning and well-being over the course of the intervention; consumer satisfaction measurers; fidelity measures (discussed below) that can capture key aspects of the interventions employed; and a range of other indexes that may be useful for other external reporting requirements. At the individual case level, the combination of qualitative and quantitative data provides the basis for monitoring and evaluating intervention. Quantitative data aggregated from scales and indexes provide the basis for program evaluation. The combination of cilent, intervention-process, and assessment and outcome measures provides a comprehensive system for naturalistic program evaluation that can be seamlessly integrated into the delivery of evidence based practices (J.S. Lyons et al., 1997; Salzer et al., 1997; Newman et al., 1994; Royse & Thyer, 1996; [Joint Commission on the Accreditation of Healthcare Organizations], 2004; Yates, 1996).

Although naturalistic designs reflect considerable external validity in their real-world application, this approach incurs some degree of threats to internal validity even when they are welf-designed and carefully implemented. Potential problems include the inability to consider other explanations for client improvement (e.g., alternative programming), substandard implementation of the intervention methods, poor data-collection procedures, moderating effects of repeated data collecting, history and maturational affects of the clients, and client-selection factors (Rossi & Freeman, 1993; Hargreaves et al., 1998; J. S. Lyons et al., 1997; K. Corcoran & Vandiver, 1996). The strength of the naturalistic evaluation

is its external validity. The quality of practice and service delivery is being judged within the context of the typically messy, complex, and unpredictable environment of the human service agency.

#### FIDELITY ASSESSMENT

Simply because an agency or an individual practitioner claims to use evidence-based practices does not mean that they are implemented with a high degree of skill. Although evaluation usually brings to mind client outcomes, measuring various aspects of the intervention is becoming increasingly important and, in some instances, is mandated by funding sources. The main purpose for measuring the intervention process itself is to ensure that evidence-based interventions are being implemented with fidelity, that is, actual service delivery is faithful to the intervention as described in "the manual." In an agency setting, three methods are available to achieve this end: qualitative case analysis in supervision or supervised focus groups; direct observation (e.g., the one-way window); and fidelity and other process measures completed by staff and/or clients as part of routine clinical documentation. These data can be entered into a data base, aggregated, and linked to client characteristics and client outcomes to enhance the program evaluation.

Qualitative process evaluation (case-study analysis) is an invaluable tool for examining implementation up close and personal. Through supervision or focus groups, practitioners can examine the intervention process through case discussions and scenario building as a brainstorming method to discuss how to deal with more challenging and less predictable cases. This constructive sharing of practice experience can help staff learn to anticipate problems that may arise and address them in a way that maintains the essential integrity of an evidencebased approach. Under selected circumstances, practitioners can be observed in vivo with clients (with clients consent) in order to compare the practitioner's intervention approach with the model, and to help the practitioner deal with unanticipated occurrences. As with program monitoring and evaluation in general, these activities should be undertaken in a context of mutual support to help refine methods and learn to adapt evidence-based practices creatively to complex client problems. However, case studies must be balanced against larger data bases compiled from fidelity scales and other intervention-process indicators such as type, frequency, and duration of service. One way to ensure reasonable congruency between the model and actual implementation is to allow for some degree of flexibility in the application of evidence-based approaches, so practitioners can adjust manualized approaches to the needs of more complex cases. The thoughtfully planned application of both qualitative and quantitative methods for measuring intervention fidelity can help ensure high-quality services.

A number of process instruments measure different dimensions of psychosocial interventions (Hill, Nutt, & Jackson, 1994; O'Hare & Collins, 1997). Most of these focus on the interpersonal aspects of psychotherapy, an important

but incomplete view of psychosocial interventions. Recently, a number of promising initiatives have demonstrated that the implementation of practice skills for social work practice can be measured reliably. These scales include the Inpatient Measure of Adolescent and Child Services and Treatment (Pottick, Hansell, & Barber, 1998), the Hospital Social Work Self-Efficacy Scale (Holden, Cuzzl, Rutter, Rosenberg, & Chernack, 1996), the Dual Disorder Treatment Fidelity Scale (Mueser et al., 2003), the Practice Skills Inventory (O'Hare & Collins, 1997; O'Hare et al., 1998; O'Hare, Tran, & Collins, 2002), the Substance Abuse Treatment Self-Efficacy Scale (Kranz, 2003; Kranz & O'Hare, in press), and a fidelity measure of service delivery with people who have severe mental illness and substance abuse problems (Teague, Bond, & Drake, 1998).

Fidelity instruments vary in the level of service delivery being measured. Variations include measurement of service program processes (such as indicators that assessments were conducted, and clients referred for treatment), the use of certain "packaged" intervention models (such as motivational interviewing, and behavioral family therapy), the use of practice skills, and basic administrative aspects of service delivery.

The Practice Skills Inventory (PSI) is one process measure that could be adapted for use as a fidelity scale. Theoretically based on broad reviews of the practice literature, the PSI measures three major categories of intervention skills: supportive skills that focus on facilitating a sound working relationship, coping-skills interventions that include a range of problem-solving and cognitive behavioral methods shown to be essential for moderate to severe psychosocial disorders, and case management skills, which are essential for coordinating complex cases. One study with experienced practitioners also supported the use of an "insight facilitation" skill (O'Hare et al., 1998), a subscale that represents more interpersonal approaches to psychosocial treatment. The PSI has been shown to have good-to-excellent internal consistency reliability for all its subscales, and has demonstrated a good factor structure with both student and experienced social work practitioners (O'Hare & Collins, 1997; O'Hare, Tran, & Collins, 2002).

The PSI has a number of potential uses that social work students, practitioners, researchers, and evaluators can explore. These include examining patterns of skill application in practice; measuring the implementation of evidence-based guidelines; examining whether skill application varies with different types of problems or severity of problems presented by clients; examining variations in skill application over time within the same case; and linking processes with outcomes. A slightly modified version of the PSI is included in appendix C to be used as an exploratory device by students and practitioners with individual cases. (It may be reproduced without permission.) The instructions direct the practitioner to indicate the number of client contacts on which completion of the scale is based. The number of contacts could range from one to several, depending on service-delivery patterns. Respondents then report the frequency with which they used certain skills with a particular client during that period of time. Respondents can describe in more detail the particular skill used. Students

and practitioners could use the scale for self-review or in supervision to compare the configuration of practice skills they relied upon with those recommended in the literature. At the program level, evaluators could aggregate data with the PSI to determine whether the proper category of skills generally conform to best practices, and use the results of such a report as a basis for providing feedback to staff. These data could prompt further supervision, consultation, or staff development.

The individual items of the PSI were designed to be somewhat general so the scale could have broad application to social work service settings. Practitioners estimate the frequency with which they used these general skills, and describe more specifically what skill they actually used with their client. In this way, the PSI can serve as a tool for both qualitative and quantitative analyses. For an item on the coping-skills subscale, for example, the practitioner could specifically define the intervention skill used with that client (in parentheses under the specific item). For a conduct-disordered adolescent, it might read "taught and role-played anger management skills." Although more validity work is required for the PSI, students and practitioners are encouraged to use the scale in an exploratory way to examine practice patterns relative to guidelines provided in evidence-based practice texts and treatment manuals.

The Substance Abuse Treatment Self-Efficacy Scale was designed to measure practitioners' confidence in carrying out substance abuse intervention skills. This scale appears in appendix D and may be used without permission. The scale has thirty-two items and measures five domains of substance-abuse skills employed by social workers: assessment/treatment planning, individual counseling, group counseling, case management, and ethics. The instructions direct practitioners to rate their level of confidence in using specific skills for working with substance-abusing clients. The scale can be used to evaluate practitioners'. training needs or, with minor modification, as a fidelity tool in environments where it is important to measure how consistently practitioners are using core substance-abuse intervention processes and skills. To be used as a fidelity scale, the instructions could be modified to have respondents measure "how confidently they applied each skill with a particular client."The instrument was validated through exploratory and confirmatory factor analysis, and showed excellent internal consistency reliabilities for all subscales (.89-,96). Further field testing across an array of service environments is needed to strengthen its external validity.

#### THE EBPSW SERVICE PLAN

The key link between individual service delivery and program evaluation is the qualitative/quantitative service delivery plan. Most practitioners and agencies are required to document their services to clients. This documentation takes many forms and is far from standardized. The format varies by funding source, accreditation organizations, and state and federal regulatory agencies. Although

documentation varies considerably, some basic assumptions are suggested here. First, documentation is required, necessary, and important for a variety of contractual, legal, risk management, and ethical reasons. Second, although service documentation is often (and sometimes justifiably) seen as a time-consuming and expensive nuisance, documentation can be an essential part of delivering and evaluating evidence-based practices for a number of important reasons: when conceptually well-designed, service plan documentation can improve the validity and reliability of assessment; clarify the goals, objectives, and methods used in the intervention; and detail the methods used for monitoring and evaluation. Third, a well-conducted assessment, intervention, and evaluation plan is essential for guiding individual service for clients, and when data from individual service plans are aggregated, they can provide a sound basis for program-level evaluation.

#### The Assessment

As outlined in chapter 2, the assessment should include a number of basic considerations: a thorough psychosocial history and problem formulation that is informed by contemporary human behavior theory, assessment of the severity of client problems across multiple problem domains, and a detailed functional assessment of psychosocial factors that affect the client's main difficulties. This detailed MDF assessment should be supported by thoughtfully chosen instruments that can also serve as outcome measures. These instruments are likely to be a combination of individual indexes specific to client problems and standardized instruments that provide a foundation for naturalistic evaluation.

#### The Intervention Plan

Once the assessment data have been collected, practitioners and clients need to collaboratively define problems and goals. This process includes, first, developing a definition of the client's problem(s) based on the MDF assessment. Although the assessment may provide a somewhat complex understanding of the factors involved in the client's problems, the final problem definition should be relatively straight-forward.

Second, practitioner and client should decide on reasonable intervention, goals, that is, achievable resolution of problems or acquisition of certain coping abilities, Goals can be stated somewhat generally, although they should represent a reasonable and clinically significant improvement in the client's condition and ability to cope.

Third, practitioners should reference evidence-based practices, discuss them with the client, and discuss how they can collaboratively and flexibly implement the intervention to accommodate the client's needs and circumstances. Interventions should be defined by the formal title of the approach, the details of actual implementation should be spelled out.

Fourth, practitioner and client must define intervention objectives, that is, short-term and hierarchically ranked stepping stones that lead toward the ultimate treatment goal. Objectives are a critical linchpin between the practitioner's intervention skills and the client's efforts at problem solving and strengthening coping skills. Objectives are likely to unfold and change as the client improves, as new problems arise, or if a new approach is taken. Treatment plans should be updated as objectives are achieved.

Objectives may be defined as "incremental steps toward a treatment goal," but they may also overlap with the interventions for one simple reason; an intervention is not something that is done to the client. The objectives are often the main vehicle by which the client implements the intervention. So, for example, the practitioner might provide psychoeducation and a brief intervention to encourage a client to try out an Alcoholics Anonymous meeting (the objective) in the coming week. A traumatized young woman who has become agoraphobic may benefit from an intervention that includes support, psychoeducation, anxiety-management skills, and practice to gradually confront the anxiety. The objective may be for her to walk down the street a quarter mile to mail a letter or pick up a few groceries every day for the next two weeks. For a child struggling with shyness and depression, the intervention may emphasize couples therapy to reduce marital conflicts that affect the child's emotional well-being. The objective may be for the couple to encourage the child to attend a birthday party unaccompanied by the parents.

The interventions are the skills and techniques the practitioner brings to the table. The objectives are intermediate goals for the client to achieve, and they should be thoughtfully chosen in collaboration with clients in a way that helps them progress toward their treatment goals. Intermittent and meaningful successes increase clients' self-efficacy and their chances of coping successfully with their difficulties. Achieving meaningful objectives is empowering for clients and helps them enhance their adaptive strengths.

## The Evaluation Plan

The evaluation plan should be briefly described in the service plan. It includes the standardized measures and idiographic indexes that were used in the assessment. It should also include a brief description of data collection (who will collect the data, at what intervals, under what circumstances). The evaluation plan serves two purposes: it is a foundation for individual qualitative and quantitative evaluation, and if broad spectrum measures are also used, the data are aggregated as part of program evaluation.

Linking well-chosen, clear problem definitions with intervention goals, choosing the intervention, constructing key objectives, and implementing clinically useful evaluation tools require considerable skill. When done well, the service plan can reduce complex information regarding the client's problems and recommended interventions to a relatively simple plan focused on problem-solv-

ing and improving a client's ability to cope. The client service plan serves many useful purposes; it is a necessary bureaucratic tool used for meeting contractual and regulatory obligations, it is a biueprint for clinical intervention that should reflect expertise in clinical assessment and intervention (often in collaboration with both the client and other helping professionals), and it stipulates the assessment and evaluation tools to be employed. The complete service plan should thoughtfully reflect all three components of EBPSW: assessment, intervention, and evaluation.