

## THE INFLUENCE OF CLIENT VARIABLES ON PSYCHOTHERAPY

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### INTRODUCTION

Controversy about the effectiveness of psychotherapy has a long history. In 1952, British experimental psychologist, Hans Eysenck, caused a furor when he proclaimed that the application of psychotherapy was no more beneficial than the absence of treatment. In his report, Eysenck (1952) summarized the results of 24 reports of psychoanalytic and eclectic psychotherapies with more than 7,000 neurotic clients treated in naturalistic settings compared with two control groups. Eysenck found that the more intensive the therapy, the worse the results. In fact, Eysenck's data suggested that clients in psychoanalytic treatment had significantly worse cure rates than clients who received no treatment.

It has been more than 40 years since Eysenck rocked the treatment community with his claims that psychotherapy did not work. Despite the use of seriously flawed research methodology and a polemic tone, Eysenck's article was extremely important to the field and challenged clinical psychologists to pay more systematic attention to the results of their efforts and has spurred a great deal of empirical research.

Thanks in large part to researchers' responses to Eysenck's charge, we now know, generally speaking, that psychotherapy does indeed help people (Lambert, Shapiro, & Bergin, 1986; Smith, Glass, & Miller, 1980; Chapter 5 in this volume). Numerous studies and subsequent meta-analyses have demonstrated that any number of specific psychotherapeutic approaches, either alone or, in some cases, in combination with pharmacologi-

cal approaches, are more effective than credible alternative psychological interventions containing nonspecific factors serving as "psychological placebos" (Barlow, 1996).

Contemporary researchers increasingly agree that psychotherapy works; nevertheless, psychotherapy research is at a critical period. A confluence of pressures both inside (e.g., evidence-supported treatment movement) and outside the profession (e.g., practice guidelines, managed care, legislation, National Alliance for the Mentally III) make it incumbent upon clinical psychologists to become better informed about the usefulness of psychotherapy. There has been a shift toward focusing research efforts on more precise questions, such as Given a client's diagnosis, which treatment is recommended? What treatments have shown efficacy in empirical trials? Does the therapy produce results beyond symptom change? Do the changes achieved during the course of treatment endure with time? How does length of treatment affect the nature of long-term outcome? Which treatments that show efficacy in clinical trials have demonstrated similar effectiveness in local treatment settings?

The issue of client variables is an abstract way of stating the obvious: no two clients begin psychotherapy in the same condition. Every client is unique in terms of range and severity of problems, developmental history and achievements, interpersonal skills, intellectual acumen, state of pain, and desire for change. Many characteristics of the client may potentially influence the therapeutic venture. At the same time, the clients' behavior in therapy will be influenced by the characteristics

and behavior of the individual therapist, for the therapeutic process is basically an interpersonal phenomenon. With a deceptively simple wisdom, Jerome Frank (1973) pointed out long ago that psychotherapy is an encounter between a demoralized client and a therapist whose goal is to energize the other. These straightforward truths lead us to the more refined questions: Which client and therapist characteristics interact most saliently and forcefully to produce symptom decline? Which of these interactions lead to improved social and work adjustment?

Comparative outcome studies of psychotherapy are costly and time consuming, and for the most part have not yielded clear evidence of the superiority of specific psychotherapies for specific disorders. Recent psychotherapy research has focused on the client's "diagnosis" and the techniques of therapy while ignoring the idiosyncratic aspects of the client that are even more salient in predicting change and guiding treatment decisions. However, large-scale studies comparing different forms of treatment for different disorders have revealed few differences in outcome based on technique. For example, recent examinations of psychotherapy outcome and process in the Treatment of Depression Collaborative Research Program (TDCRP) suggested that outcome is better predicted by client characteristics than by the effects of particular kinds of interventions (Ablon & Jones, 1999; Blatt, Quinlan, Pilkonis, & Shea, 1995; Zuroff et al., 2000). Reviewers (Bergin & Lambert, 1979; Frank, 1979) have suggested that the largest proportion of variance in therapy outcome is accounted for by the personal characteristics and qualities of the client. As much as 40% of client improvement in psychotherapy can be attributed to client variables and extratherapeutic influences (Lambert, 1992). These findings suggest that the study of client variables may have much to offer for our understanding of psychotherapy's effectiveness. Identification of premorbid clinical and personality characteristics predictive of outcome might help clinicians guide treatment choices and revise treatment methods based on the needs of different types of clients.

This chapter highlights the client attributes and characteristics that profoundly shape and influence therapeutic process and outcome. We review a number of relevant conceptual and methodological issues related to the influence of client variables on therapy selection, processes, and outcome. This chapter builds on the previous edi-

tions of this chapter (Garfield, 1994; Garfield & Bergin, 1986). Garfield's (1994) last review emphasized client variables in isolation, whereas we think the field is currently emphasizing client variables in interaction with both therapist and treatment variables. We emphasize client variables as mediators and moderators of psychotherapy process and outcome. Throughout this review we emphasize the interaction of client characteristics and the growing relationship with the therapist. This interaction is such that any research focused exclusively on client variables is (falsely, in our minds) assuming that the therapist reaction does not influence the client variable in question. As research in this area becomes more sophisticated, the interaction of client characteristics with therapist response will likely become the focus of clinical concern and research interest.

The previous chapter emphasized specific client variables of social class, personality, diagnosis, age, sex, intelligence, and length of disturbance. In this chapter, we review more current constructs relating to the client such as interpersonal relatedness and preparation for change. Since the previous edition (Garfield, 1994), psychotherapy research data by client diagnosis has grown considerably. Although this orientation has its strengths and weaknesses, the accumulation of data organized and investigated by client diagnosis and related treatment is so prominent in the field that it necessitates some review in this chapter. Garfield (1994) mentioned the influence of socioeconomic variables and ethnicity, but there has been a major accumulation of data on the psychotherapeutic influence on clients, with a diversity of ethnicity and socioeconomic levels, and we emphasize findings in this area.

## THE RANGE OF CLIENT CHARACTERISTICS

The number of client variables with potential for informing the process and outcome of psychotherapy is virtually limitless. Everything from genome and brain chemistry to demographic variables and environmental conditions to personality traits, to problem area/diagnosis is arguably related to psychotherapy and its ingredients. Client characteristics can be external to the individual (e.g., social support) or intimate aspects of the individual (e.g., intelligence). Client characteristics can be invariant (e.g., gender, ethnic membership), relatively stable (e.g., SES, personality traits), or

quite variable (e.g., motivation for change). Client variables can be psychological in nature such as personality traits, or they can be part of the individuals' biological system (e.g., state of REM sleep characteristics). Over the years the type of client variables investigated has apparently shifted from stable demographic variables to a broader range of variables, with increasing emphasis on the interaction of client variables with treatment variables as provided by the therapist.

The presence of an almost limitless number of client variables forces the reviewer (and clinician) to select those variables that have proven most relevant to essential aspects of the therapy enterprise. With the advantage of a growing body of information on the key processes and outcome of psychotherapy research, we have elected to focus on the specific client variables that relate to the matching of client and psychotherapy, process of psychotherapy, and therapy outcome.

Not only are there different types and sources of client variables, but these variables function in different ways in relation to psychotherapy process and outcome. Client variables can be conceptualized as static predictors of response to treatment. Thus, the clients' gender or ethnic membership can be examined as a predictor of treatment process or outcome. A client variable can be seen as a moderator or mediator of change (Holmbeck, 1998). A moderator variable affects the relationship between the predictor variable and a dependent variable, and the value or level of the moderator variable makes a differential impact on the dependent variable. In contrast, a mediator variable is a mechanism through which the independent variable affects the dependent variable. Thus, the independent variable influences the mediator, which, in turn, influences the outcome or dependent variable. Finally, a client variable can be conceptualized as a prescriptive variable, that is, one that prescribes a certain treatment as opposed to competing treatments. For example, in the evidence-based treatment movement, the client variable of diagnosis is seen as a prescription for certain psychotherapies.

## CHARACTERISTICS OF THOSE WHO SEEK THERAPY

### Those Who Seek Therapy

Who is the psychotherapy client? What are the characteristics of individuals who request or receive psychotherapy in contrast to those who

do not? Our examination of client variables and psychotherapy matching, process, and outcome should not be limited to the client variables describing only those who undergo psychotherapy. However, knowledge of those who obtain psychotherapy does help define the limits of the current research information on client variables and psychotherapy.

In the general population, those who report emotional distress (Veroff, Kulka, & Douvan, 1981; Ware, Manning, Duan, Wells, & Newhouse, 1984), exhibit psychological symptoms (Boyd, 1986; Yokopenic, Clark, & Aneshensel, 1983), and consider their mental health to be poor (Leaf et al., 1985) are most inclined to seek professional mental health care. Women are more likely than men to seek both informal support and professional help (Butler, Giordano, & Neren, 1985; Horwitz, 1977; Kessler, Brown, & Broman, 1981). Age is also related to help-seeking behavior. The elderly are more reluctant than younger individuals to seek help from mental health professionals, and they rely more readily on general medical practitioners and the clergy (Leaf, Bruce, Tischler, & Holzer, 1987; Waxman, Carner, & Klein, 1984). Those elderly who sought assistance, as compared to those who did not, had poor psychological well-being, more physical health problems, a higher level of stressful events, and greater deficits in social support (Phillips & Murrell, 1994).

Stress is related to seeking the services of mental health professionals, though in a somewhat complicated manner. Not everyone who experiences stress seeks mental health services. Those seeking assistance may experience the impact of the stressors more intensely (Goodman, Sewell, & Jampol, 1984) and are less likely to have strong social support from friends and relatives (Birkel & Reappucci, 1983).

Howard and colleagues (Howard et al., 1996) have summarized patterns of mental health service utilization using data from the Epidemiologic Catchment Area (ECA) survey and the National Comorbidity Survey (NCS). Both studies indicated that about 30% of adults will experience a diagnosable mental condition in any given year, and the majority of these individuals (from 56 to 60%) will have more than one disorder. What is striking is that in the ECA survey, more than 70% of those with a mental disorder received no services, and only 13% obtained treatment from a mental health professional. This would indicate that the vast majority of data we have on clients

and its relationship to psychotherapy is based on information from a very small percentage of the individuals who actually need intervention.

### Early Termination

Early termination or attrition from psychotherapy is an issue that has important clinical implications. From the clinician's point of view, those individuals who drop out from treatment prematurely are not taking advantage of an important resource in their lives. If the early termination can be predicted, the initiation and course of therapy can potentially be modified in order to motivate the client for concentrated work toward change and a reduction in premature dropout.

Most studies have suggested that age is not important in psychotherapy retention (DuBrin & Zastowny, 1988; Gunderson et al., 1989; Sledge, Moras, Hartley, & Levine, 1990). In contrast, several other variables seem to be important. In a multisite study of panic disorder, the client variables of lower household income and negative attitudes toward the treatment offered were independently associated with attrition (Grilo et al., 1998). Similarly, it was found that for clients suffering from obsessive-compulsive disorder, strong incongruent treatment expectations predicted attrition (Hansen, Hoogduin, Schaap, & de Haan, 1992).

Organista, Munoz, and Gonzalez (1994) and Miranda, Azocar, Organista, Dwyer, and Arian (under review) evaluated the benefits of a group cognitive/behavioral treatment for depression in clients with low income and the majority of whom were from Latino or African-American minority groups. The dropout rate was higher in this low-income minority population (40 to 60%) than in the NIMH multisite depression study (Elkin, Shea et al., 1989). Importantly, Miranda and colleagues found that adding case management services significantly reduced the dropout rate. Significant improvement in depression was reported in both studies, but on average the clients remained in the depressed range even with treatment according to their self-report questionnaire information.

Clients with a personality disorder diagnosis have been found to be at high risk for premature dropout, whether in inpatient settings (Chiesa, Drahorad, & Longo, 2000) or outpatient treatment settings (Gunderson et al., 1989; Shea et al., 1990; Skodol, Buckley, & Charles, 1983). The dropout rates vary from 42% (Gunderson et al., 1989) to 67% (Skodol, Buckley, & Charles, 1983). Given the dropout rate, the question becomes one

of understanding the operative variables. Clarkin and colleagues (Smith, Koenigsberg, Yeomans, Clarkin, & Selzer, 1995; Yeomans et al., 1994) analyzed factors associated with attrition from psychotherapy for clients diagnosed with borderline personality disorder. They found that younger clients and those with high initial hostility were more likely to withdraw early from treatment. In a subset of clients, those who showed a predominance of narcissistic themes in their responses on the Rorschach test at the beginning of treatment were more likely to drop out of treatment, whereas clients who continued in treatment showed a predominance of rapprochement themes (Horner & Diamond, 1996). Hilsenroth, Handler, Toman, and Padawer (1995), using the Minnesota Multiphasic Personality Inventory-2 and the Rorschach, examined 97 clients who prematurely terminated psychotherapy and 81 clients who completed at least six months of treatment. They found that Rorschach variables of interpersonal relatedness, psychological resources, and level of psychopathology significantly predicted premature termination. Beckham (1989) found that an initial negative impression of the therapist by the client predicted early dropout from psychotherapy.

There is a sharp contrast between the number of clients who terminate therapy after one session and the attention clinicians give to recommending no treatment for a particular client. With rare exceptions (see Frances & Clarkin, 1981) there has been no research attention given a recommendation of no treatment by the professional assessor/therapist following the assessment of clients as the optimal course of action.<sup>2</sup> This discrepancy implies that clinicians almost uniformly recommend treatments to those who seek help, while clients often decide after evaluation that pursuing treatment is not needed or indicated.

### Summary

The epidemiological data suggest that only a minority of individuals who need mental health services as indicated by their diagnostic status actually seek assistance from the professionally trained practitioners. If clinicians wish to seek out the many who need psychological assistance but do not seek it, they must make contact with those professionals in the community who come into contact with troubled individuals, for example, physicians, religious leaders, school systems, and divorce lawyers.

If the individual does seek assistance, he or she is almost automatically placed in therapy, with lit-

the clinician attention to those who might handle their difficulties on their own or with watchful followup. However, many clients, after only one or a few contacts with the mental health system, decide that they can do without assistance. The development of a sharper distinction between those who do leave early and those who follow through on attempts to seek out professional assistance deserves more investigative attention. Among those variables that appear most important are negative attitudes toward the therapist or psychosocial treatment in general. In addition, there is an important clinical need to attend to client reasons for prematurely foregoing professional assistance from which they could potentially derive some important benefits. Given the large number of clients who leave treatment prematurely, study in this area should be given high priority.

## PROCESS AND OUTCOME

### Problem Area/Diagnosis and Severity

From a common-sense point of view, all psychotherapy should be targeted to the nature of the client's difficulty, problem, and psychopathology (depending on one's conceptualization of the problem area). There should be an inherent match between the clients' problem area and the therapeutic interventions that are constructed to alleviate or change that difficulty, problem area, and/or diagnostic entity.

### *Diagnosis as the Prescriptive Client Variable*

Following the articulation of DSM-III in 1980 (APA, 1980), this diagnostic template and its successors have taken center stage in the description of pathology for reimbursement purposes, as well as in planning and guiding psychotherapy research as funded by the National Institute of Mental Health (NIMH). Many cogent arguments can be made for the use of alternatives to a categorical diagnosis, such as dimensional scores on symptom and trait measures. However, the DSM system has guided therapy research, and thus we are accumulating a body of information based on the client variable of diagnosis as defined by the four successive diagnostic manuals.

DSM-IV (APA, 1994) defines a mental disorder as a behavioral or psychological syndrome or pattern that an individual experiences or exhibits as clinically significant because it is associated with distress (e.g., a symptom) or disability (e.g.,

impairment in one or more areas of functioning) or with an increased risk of suffering death, pain, disability, or loss of function. In order to facilitate a systematic evaluation of the client with reference to mental disorders, general medical conditions, psychosocial and environmental problems, and level of functioning, the DSM-IV is a multi-axial system: Axis I—symptom disorders, Axis II—personality disorders, Axis III—general medical conditions, Axis IV—psychosocial and environment problems, and Axis V—a rating of the client's overall level of functioning. In actual practice, most psychotherapy research is focused on the Axis I condition, with little research on the Axis II personality disorders. As described later in this chapter, Axis II (personality disorders), IV (psychosocial and environmental problems), and V (overall functioning, related to severity of the illness and impact on functioning) are often empirically related to process and outcome of therapy.

Much has been written about the advantages and disadvantages of the DSM diagnostic system. The DSM system has been criticized for its promotion of the medical model to the detriment of a biopsychosocial understanding of conditions and their treatments, for its way of defining a mental disorder, for the proliferation of diagnoses across editions, and for its self-proclaimed atheoretical stance (Nathan, 1998). The conscious meanings of behaviors that are not considered in the DSM criteria are actually most relevant to treatment planning and its execution (Wakefield, 1998).

The use of DSM-IV as a guide for psychotherapy outcome research is a mixed blessing. For diagnoses that are closely tied to behaviors, such as alcohol and substance abuse, the diagnosis is tantamount to a description of a problem that is a target for treatment. In contrast, for diagnoses such as depression, there are many routes to such a feeling state, and the behaviors that are related to it are often complex and idiosyncratic. From a research point of view, there are problems with selecting a diagnostically "homogeneous" sample and an appropriate comparison group in order to investigate the impact of a given intervention. Clients selected solely by the diagnostic system for a specific disorder are not truly "homogeneous" from many points of view. First of all, two clients may actually obtain the same diagnosis but have very few common symptoms since DSM-IV is polythetic in nature. Second, most clients have more than one diagnosable condition or disorder. To use a common clinical situation, two clients may exhibit enough criteria to

meet the diagnosis for major depressive disorder, but one client also has one or more Axis II personality disorders and the second client has none. Finally, clients with the same diagnosis at best have the same symptoms on either Axis I or Axis II, but other client variables can be quite heterogeneous. For example, two clients may have exactly the same symptoms that qualify for a major depressive disorder but one is married with a successful career and the other is unmarried with a poor or absent work history.

Thus, the movement to publicize lists of single DSM diagnoses with empirically supported or validated treatments (Chambless et al., 1998) can be extremely oversimplified and potentially misleading. The lists provide a simplistic algorithm for matching a client with a single diagnosis to a treatment for that diagnosis. Such an approach totally ignores the clinical reality that no two clients with the same single diagnosis are truly alike, and these differences are often relevant to treatment planning. Nondiagnostic client variables are totally ignored in this simplistic approach.

We do not review here the extensive research on psychotherapy outcome by the client variable of DSM diagnosis, for this research is extensively covered by other authors in the following chapters in this *Handbook*. Rather, we provide a review of the salient client diagnoses and problem areas that are related to treatment outcome studies. There have been a number of reviews of client diagnoses as a characteristic or condition of the client which provides a target for particular types of treatments. The reviews of this literature are growing, including reviews for government and practitioners (e.g., Roth & Fonagy, 1996), the generation of treatment guidelines by researchers (Beutler, Clarkin, & Bongar, 2000), independent institutes such as the Cochrane Institute, guilds such as the American Psychiatric Association, and the recent excellent review by the British Psychological Society Centers for Outcomes Research and Effectiveness for the UK Department of Health (2001). The British review includes the Cochrane reviews in its purview and provides an up-to-date summary for client diagnoses and problem areas including depression, anxiety disorders, eating disorders, somatic complaints, personality disorders, and deliberate self-harm.

### *Nondiagnostic Client Variables Related to Specific Diagnoses*

With the growing list of psychotherapies that have shown efficacy in the treatment of a specific

diagnosis as compared to a no-treatment control, some attention has been given to the nondiagnostic client characteristics that are related to the process and outcome in these studies. This information is most abundant as related to depression and substance abuse.

For example, Whisman (1993) has reviewed the mediators and moderators of change in the cognitive treatment of depression. Certain key client variables related to the depressive condition have been found to be mediators of treatment response; that is, they mediate the influence of independent variables on the dependent variables in the treatment. The strongest support for mediation was found for attributional style and to a lesser extent for dysfunctional attitudes. There is also evidence that certain client characteristics have a moderating influence on cognitive treatments. Sociodemographic characteristics are typically related to outcome (Dobson, 1989; Jarrett, Eaves, Grannemann, & Rush, 1991), whereas intelligence is not (Haaga, DeRubeis, Stewart, & Beck, 1991). Client-learned resourcefulness was related to outcome in one study but not replicated in three other studies (Beckham, 1989; Jarrett, Giles, Guillon, & Rush, 1991; Kavanagh & Wilson, 1989). A positive outcome from CT was observed in those clients who exhibited a positive expectation of help (Gaston, Marmar, Gallagher, & Thompson, 1989), a strong commitment to treatment (Marmar, Gaston, Gallagher, & Thompson 1989), a strong endorsement of the cognitive conceptualization of depression, and a willingness to learn new coping strategies and complete homework assignments.

Thase et al. (1997) have taken the research on client variables to new levels by investigating how the sleep profiles of patients with recurrent major depressive disorder are influenced by interpersonal therapy. Those clients with abnormal sleep profiles had significantly poorer clinical outcomes than those with normal sleep profiles. In addition, 75% of those clients who did not respond to IPT manifested remission during subsequent pharmacotherapy.

### *Severity of Symptoms*

Previous reviews of general outcome research have concluded that severity of symptoms is related to poor treatment response (Beckham, 1989; Beutler & Hamblin, 1986; Garfield, 1994; Hoberman, Lewinsohn, & Tilson, 1988; Lambert & Anderson, 1996; Luborsky, Crits-Christoph, Mintz, & Auerbach, 1988). For example, random

regression models were used to examine the role of depression severity in the NIMH Treatment of Depression Collaborative Research Program (TDCRP) (Elkin et al., 1995). In this large *N*, multisite study, the initial severity of depression and the impairment in functioning significantly predicted differential treatment response. There were no differential treatment responses with the less severely ill clients, but among those who were more severely depressed and incapacitated, medication played a more significant role in combination with psychosocial treatment.

In a study of 117 depressed clients stratified for depression severity (Shapiro et al., 1994), clients were treated in either cognitive behavioral or psychodynamic interpersonal therapy for either 8 or 16 sessions. On most measures of outcome, both treatments were equally effective across the severity of depression levels. However, those with more severe depression improved substantially more with the 16- in contrast to the 8-session treatment duration.

Similarly, in the treatment of clients with addictions, those with less severe symptoms demonstrated the best treatment response (McLellan, Luborsky, Woody, Druley, & O'Brien, 1983). The six-month treatment outcome for 649 clients who were dependent on opiates, alcohol, and/or cocaine was examined across 22 treatment settings (McLellan et al., 1994). Greater substance use at followup, regardless of the abused substance, was predicted by a greater severity of the alcohol and drug use problem at admission to treatment. The severity of the problem, not the number of services, was the sole predictor of this outcome. In addition, better social adjustment outcome at followup was negatively related to more severe psychiatric problems, employment difficulties, and family problems at admission.

### **Functional Impairment**

For conceptual clarity and assessment focus, it is important to distinguish between the severity of the symptoms, the major focus of Axis I diagnoses, and the functional impairment that either results from or preceded the symptoms and provides the context for the arousal of symptoms. Functional impairment is addressed in DSM-IV on the axis related to overall level of functioning. Two individuals can have a depression of minor severity or major severity, in the context of previous high-level functioning (productive work, satisfying interpersonal relations) or previous low-level functioning.

In general, level of functional impairment is negatively correlated with prognosis across disorders such as depression (Gitlin, Swendsen, Heller, & Hammen, 1995; Kocsis et al., 1988; Sotsky et al., 1991), bulimia nervosa (Fahy & Russell, 1993), obsessive compulsive disorder (Keijsers, Hoogduin, & Schaap, 1994) and chemical dependency (McLellan, Woody, Luborsky, O'Brien, & Druley, 1983). In the treatment of depressed individuals, the best predictor of response to interpersonal psychotherapy (IPT) was emotional health prior to the initiation of treatment (Rounsaville, Weissman, & Prusoff, 1981). Luborsky and colleagues (Luborsky, 1962; Luborsky et al., 1980) found a significant positive correlation between psychological health as rated on the Health-Sickness Rating Scale (HSRS) and treatment outcome. In a study of 59 clients treated for 12 weeks with brief focal psychodynamic therapy, clients who had shown the highest level of adaptive functioning before therapy demonstrated the most improvement (Free, Green, Grace, Chernus, & Whitman, 1985).

In yet another post-hoc analysis of client predictors of treatment outcome for the NIMH study of the treatment of depression, Sotsky et al. (1991) examined the treatment of 239 outpatients with major depressive disorder in a 16-week treatment. Six client characteristics predicted outcome across all treatments (interpersonal psychotherapy, cognitive behavioral therapy, medication and clinical management, or placebo and clinical management), and this included client dysfunction (social and cognitive), expectation of improvement, and three aspects of the symptoms (endogenous depression, double depression, and duration of current episode). In addition to these six client characteristics which predicted across the treatments, there were some significant client predictors of a good match with a particular treatment. These authors reported on four such significant matches. Low social dysfunction was a predictor of superior response to IPT. Low cognitive dysfunction predicted response to CBT and to imipramine. High work dysfunction predicted the response to imipramine, and finally, high depression severity and impairment of function predicted response to imipramine and to interpersonal psychotherapy. These findings suggest that the focus of the intervention relates to outcome (e.g., low social dysfunction responses to IPT, which focuses on social interactions) and that the severity of the condition (symptoms and functioning) calls for a combination of medication and psychotherapy.

## Comorbidity

The pervasive use of DSM-III and its successors in psychotherapy research has fostered examination of the so-called comorbid conditions as they relate to the psychotherapy process and the outcome of a specific symptom-based disorder (see Kendall & Clarkin, 1992). With the distinction since DSM-III (APA, 1980) between symptom conditions (Axis I) and personality disorders (Axis II), an empirical literature has accumulated concerning the influence of the personality disorders in the treatment of symptom conditions.

**PERSONALITY DISORDER AND DEPRESSION.** Most studies of major depressive disorder that have included clients with comorbid personality disorders have found poorer outcomes associated with co-occurrence of any personality disorder (Burns & Nolen-Hoeksema, 1992; Diguier, Barber, & Luborsky, 1993; Fiorot, Boswell, & Murray, 1990; Greenberg, Craighead, Evans, & Craighead, 1995; Hardy et al., 1995; Shea et al., 1990; Thompson, Gallagher, & Czirr, 1988). The importance of personality disorder, as a client variable, is also suggested by the fact that studies show the reported frequency of personality disorder diagnosis within a depressed population ranges from 24% (Hardy et al., 1995) to 87% (Friedman, Aronoff, Clarkin, Corn, & Hurt, 1983).

Burns and Nolen-Hoeksema (1992) conducted a naturalistic trial of cognitive behavioral therapy for depressed clients and found that borderline personality disorder, in particular, was related to poorer outcome. The diagnosis of a personality disorder was related to treatment outcome in the TDCRP study (Shea et al., 1990). Seventy-four percent of the depressed sample in the TDCRP study had a comorbid personality disorder. Clients with personality disorders had significantly worse outcome in social functioning than clients without personality disorders, and they were more likely to have residual symptoms of depression at termination.

In a study of 25 clients with major depression treated with 16 sessions of supportive-expressive dynamic therapy, clients with personality disorders showed poorer outcome compared to those without personality disorders (Diguier, Barber, & Luborsky, 1993). Hardy et al. (1995), in a randomized controlled trial of 114 depressed outpatients seen in either brief psychodynamic interpersonal therapy (BPI) or cognitive behavioral therapy (CBT), found that the presence of a cluster C (anxious-fearful) personality disorder

reduced the effectiveness of BPI, but not CBT. Finally, others (Fiorot, Boswell, & Murray, 1990; Thompson, Gallagher, & Czirr, 1988) have reported that treatment trials with depressed elderly outpatients using behavioral, dynamic, or eclectic therapies have poorer outcomes for clients with a comorbid personality disorder.

In a review of 27 different studies, McDermut & Zimmerman (1998) concluded that depressed individuals without a comorbid personality disorder responded differently to treatment than depressed individuals with a personality disorder, the latter being more likely to not recover and to remain more symptomatic after treatment. This difference between those symptomatic individuals with and without personality disorder has direct relevance to both the need for an initial assessment and treatment planning (Clarkin & Abrams, 1998). Clearly, the evidence to date suggests that personality disorder, particularly borderline personality disorder, is a prevalent and powerful client characteristic that moderates outcome in depressed individuals (Wells, Burnam, Rogers, Hays, & Camp, 1992). Individuals diagnosed with borderline personality disorder (BPD) or obsessive compulsive personality disorder (OCD) have relatively high levels of negative outcome (Mohr, 1995).

**PERSONALITY DISORDER AS A MODERATOR OF OUTCOME IN ANXIETY DISORDERS.** In a sample of 13 outpatients with social phobia, Turner (1987) found that personality disorder diagnosis predicted differential outcome. Schizotypal, borderline, and avoidant personality disorders were related to poor outcome, whereas histrionic and dependent personality disorders were related to better outcome. Clients with dependent personality disorders specifically responded better when in-vivo exposure was controlled by the therapist. Studies of anxiety disorders with comorbid avoidant personality disorder have found conflicting results (Brown, Heimberg, & Juster, 1995; Chambless, Tran, & Glass, 1997; Turner, 1987). The presence of a personality disorder has been found to be an obstacle to the treatment of obsessive-compulsive disorder (AuBuchon & Malatesta, 1994; Cottraux, Messy, Marks, Mollard, & Bouvard, 1993; Jenike, 1990). AuBuchon and Malatesta (1994) found that obsessive-compulsive clients with comorbid personality disorders responded less well to comprehensive behavior therapy than those without personality disorders. Hermesh, Shahar, and Munitz (1987) found that



all eight of their borderline clients failed to comply with behavioral or pharmacological treatments for OCD. Similarly, Jenike, Baer, Moinichiello, and Carey (1986) found that only 7% of clients with schizotypal personality disorder responded to behavioral treatment, compared to 90% of clients without.

**PERSONALITY DISORDER AND EATING DISORDERS.** A number of studies suggest that a comorbid personality disorder also has deleterious effects on the treatment outcome of eating disorders. Rossiter, Agras, Telch, and Schneider (1993) found that eating-disordered patients with comorbid personality disorders have poor outcome in comparison to eating-disordered patients without personality disorders. Cooper and colleagues (Coker, Vize, Wade, & Cooper, 1993; Cooper, Coker, & Fleming, 1994) found that comorbid personality disorder resulted in poor outcome in the treatment of eating disorders. Wilfley et al. (2000), in a randomized controlled study (group cognitive behavioral therapy versus group interpersonal psychotherapy) of 162 outpatients, found that the presence of any Axis II psychopathology did not predict treatment outcome. However, the presence of Cluster B personality disorders did predict poor outcome at one year following treatment. The association found between Axis II disorders and baseline eating-related psychopathology also suggested that this symptomatology may be more severe when occurring in the context of a personality disorder. This may be because individuals with personality disorders are often likely to have experiences (e.g., affective instability, social isolation) that trigger binge episodes. This line of reasoning would suggest that binge eating disorder clients with Cluster B personality disorders may require a specialized treatment that addresses cognitive and affective instability.

**HISTORY OF SEXUAL ABUSE.** Gleaves and Eberenz (1993), in a review of 464 women, assessed the history of sexual abuse in bulimic women who failed to engage in CBT treatment. Approximately 71% of the women who failed to respond to treatment reported a history of sexual abuse. The researchers propose that treatment should address both the eating disorder and the post-traumatic condition, if symptoms and histories of the trauma arise during treatment sessions in individuals failing to respond to CBT. Therefore, although CBT has consistently and convincingly been found to be effective in treating bulimia

nervosa, certain client characteristics limit effective outcome.

## Summary

Use of the DSM diagnostic system to guide psychotherapy research has had both negative and positive effects. The emphasis on client diagnosis has resulted in the lack of attention to other salient client variables (Pilkonis & Krause, 1999). In contrast, a benefit of the DSM multiaxial system is the inclusion of separate diagnostic axes, including one for personality disorders, which have resulted in the accumulation of data on the client variable of personality/personality disorder in the treatment of common symptom disorders. This research has demonstrated across a number of symptom disorders that the treatment effects for the symptoms are attenuated for those clients with co-occurring personality pathology in contrast to those without. This is an important finding that should influence treatment planning and future research efforts aimed at discovering more effective ways of treating those with concurrent symptoms and personality difficulties. At the very least, therapists should assess for both symptoms and personality disorders in their clinical evaluations. When an Axis II personality disorder is present, they should plan treatment for more modest gains, anticipate and address potential early patient dropout, and plan for disruptions in the treatment adherence and alliance. Many of the treatment manuals for symptom disorders such as anxiety and depression give insufficient information on approaches to patients with personality disorders who will present unique and difficult challenges in the treatment.

## Sociodemographic Variables

### Age

The usual approach to the influence of age on psychotherapy is to assess the relationship in a treated group of adults with a limited age range. It would appear that age is not important in either therapy retention (Berrigan & Garfield, 1981; Dubrin & Zastowny, 1988; Gunderson et al., 1989; Sledge, Moras, Hartley, & Levine, 1990) or treatment outcome (MacDonald, 1994; Smith, Glass, & Miller, 1980). One possible exception is the finding that younger age is associated with poor retention and outcome in the treatment of substance abuse disorders (Agosti, Nunes, & Ocepeck-Welikson, 1996). This latter finding may be due to the relationship between age and the natural course of substance abuse.

A different approach that is currently receiving more attention is to regard the client's age as an important variable in gauging the focus and nature of intervention. This approach is based on the notion that age is related to the psychological and biological nature of the organism, and thus to the expression or manifestation of the disorder in question. For example, clinicians intervene with children and adolescents in treatments that are structured differently from those for adults.

A meta-analysis of 17 empirical studies of the treatment of depressed elderly (Scogin & McElreath, 1994) indicated that psychosocial interventions are quite effective, with a mean effect size of treatment versus no treatment or placebo of .78. This figure compares well with the mean effect size for psychosocial treatments for depression in nonelderly adults. Interpersonal psychotherapy, in particular, has been shown to be effective with the elderly in both the acute and maintenance treatment of depression in the elderly (Frank et al., 1993; Reynolds, Frank, Houck, & Mazumdar, 1997; Reynolds et al., 1999). Thompson, Gallagher, and Breckenridge (1987) have provided empirical support for the effectiveness of cognitive behavioral therapies delivered in the individual format for depression in older adults. In comparing cognitive, behavioral, and brief psychodynamic treatments for depression in ambulatory elderly, this research group found comparable remission rates across treatment types and no difference in stability of effects for over two years (Gallagher-Thompson, Hanley-Peterson, & Thompson, 1990; Thompson, Gallagher, & Breckenridge, 1987). Although the majority of clients achieved remission, a subgroup of clients who did not respond to initial treatment, remained depressed at followup one and two years later despite continued treatment.

Cognitive behavioral treatments are also effective when delivered in a group format (Arean et al., 1993; Beutler et al., 1987; Steuer et al., 1984). Kemp, Corgiat, and Gill (1992) found that cognitive behavioral group therapy was effective in reducing depressive symptoms in older clients who had the presence or absence of disabling chronic illness. In contrast, however, those with disabling physical illnesses did not show continued decline in depression following group treatment, while those without disabling illnesses continued to improve.

## Socioeconomic Status

In general, demographic characteristics and socioeconomic status (SES) have been found to be related to continuation in psychotherapy. Early studies (Berrigan & Garfield, 1981; Dodd, 1970; Fiester & Rudestam, 1975) found a positive relationship between higher social status and length of stay in treatment. For example, Armbruster and Fallon (1994) found lower SES to be associated with premature termination among general psychotherapy clients. In the treatment of substance use, a shorter length of stay was associated with lower educational background (Agosti, Nunes, & Ocepeck-Welikson, 1996; Epstein, McCrady, Miller, & Steinberg, 1994; McCusker, 1995). These results are not always consistent, however, and one can also find other studies in which SES was not related to terminating or remaining in treatment (e.g., MacDonald, 1994; Sledge, Moras, Hartley, & Levine, 1990).

## Gender

Prior reviews make the generalization that there is usually no gender difference in premature termination from therapy or any gender effects in psychotherapy outcomes (Garfield, 1994; Greenspan & Kulish, 1985; Petry, Tennen, & Affleck, 2000; Sledge, Moras, Hartley, & Levine, 1990). In contrast to gender effects in general, gender might make a substantial difference with disorders that have a prevalence rate that is related to gender, such as depression. The prevalence of depression is about twofold in females in comparison to males (Kessler, McGonagle, Swartz, Blazer, & Nelson, 1993; Weissman & Klerman, 1977). In addition, the cause of depression may be different in females in contrast to males (Cyranowski, Frank, Young, & Shear, 2000; Nolen-Hoeksema, 1987). Despite the differences in prevalence and causes, with few exceptions, sex has been unrelated to outcome in the treatment of depression (e.g., Holton et al., 1992; Paykel et al., 1999; Sotsky et al., 1991). Unfortunately, studies are rarely designed specifically to study this issue, and occasionally there is an exception to the lack of difference due to gender. For example, Thase, Frank, Kornstein, and Yonkers (2000) found across studies that women who were manifesting more severe depression did better in interpersonal therapy than they did in cognitive therapy. This result suggests that the search for gender differences in interaction with treatment is worth pursuing in future research.

There has been some attention to same-sex pairing between client and therapist, with some finding same-gender pairing providing greater client satisfaction and retention in treatment (Fujino, Okazaki, & Young, 1994) and others showing preference for opposite-gender matches (Willer & Miller, 1978). One large study (Flaskerud & Liu, 1991) found that client-therapist gender similarity had little effect on outcome. These inconsistent results suggest that the more sophisticated methods may reveal some advantage to matching and that further testing for matching within specific problem areas may reveal optimal matches.

### Race

Several early studies found that ethnic minority clients attended significantly fewer sessions than Caucasian clients (Greenspan & Kulish, 1985; Salzman, Shader, Scott, & Binstock, 1970; Sue, McKinney, Allen, & Hall, 1974). However, other studies found no relation between race and premature termination (Sledge, Moras, Hartley, & Levine, 1990). Well-controlled research by Jones (1978; Jones & Zoppel, 1982) found that race-related client and therapist variables (e.g., race matching between therapist and client) were not decisive in therapy outcome. African-American and Caucasian clients benefited equally, and no differences were found between racially matched or mismatched therapist-client dyads. Lerner (1972) investigated the effects of treatment on severely disturbed and predominantly lower class African-American and Caucasian clients seen by Caucasian therapists. The vast majority of clients improved, and there was no evidence of racial differences in outcome. In addition, she found that low-income clients, regardless of race, showed more improvement in therapy when seen by therapists holding egalitarian attitudes toward low-income people in general than did clients not seen by therapist holding such attitudes. Ross (1983), using the same measure of therapist attitude, found that low-income African-American clients remained in therapy longer when seen by therapists with egalitarian attitudes. Within such a context, as the client communicates both verbally and nonverbally, the therapist allows himself or herself to empathize with the client's emotional position and develop an involving intersubjective perspective with the client. Thus, Lerner (1972) and Ross's (1983) research on the impact of therapist attitudes on treatment outcome found that egalitarian atmosphere is an important

variable in work with lower-class clients. The studies by Lerner and Jones represent some of the most detailed and rigorous treatment studies involving African-American clients.

Occasionally, race-based differences are found and suggest the need for continued research. For example, Rosenheck, Fontana, and Cottrol (1995) found that African-American veterans with post-traumatic stress disorder were more likely to drop out of therapy and were less likely to benefit from treatment than their Caucasian counterparts. Unfortunately, these researchers did not study therapist ethnic group identification.

Various writers note how therapists talk of "properly managing" the initial sessions with clients of color (Griffith & Jones, 1979; Jenkins, 1997; Sue & Zane, 1987). Griffith and Jones (1979) have suggested that effective work with African-American clients, especially when the therapist is Caucasian, involves working quickly to establish a therapeutic alliance. Jenkins (1997) points out that it is important to emphasize the quality of the therapist-client relationship as fundamental to positive change, especially when working with ethnic minority clients. Sue and Zane (1987) note the importance of the therapist's establishing his or her "credibility" early on with the ethnic minority client. Gibbs (1985) suggests that African-American clients, mindful of racism, initially tend to take an interpersonal orientation in the therapy situation. That is, they are particularly sensitive to the process going on between themselves and their therapists. Sue and Zane (1987) contend that ethnic-minority clients come to believe in the credibility of therapists through two factors: ascribed and achieved status. Ascribed status is the position or role that one is assigned by others, usually based on factors such as age, expertise, and sex. Achieved credibility refers more directly to therapists' skills. Through the actions of therapists, clients come to have faith, trust, confidence, or hope. Unfortunately, the clinical wisdom offered for maximizing treatment benefits is seldom studied and remains largely untested.

In addition to the questions relating to the race/cultural background of therapist and patient, there are potential research questions concerning the relationship between race and the nature, features, expression of the problem area, or diagnostic issues faced by the client. For example, the presence of eating disorders in Caucasian and African-American women has been found to manifest a different pattern of pathology (Pike,

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Dohm, Stiegel-Moore, Wilfley, & Fairburn, 2001). In both groups, eating disorders are associated with decrements in functioning, but the two groups differ on aspects of the eating disorder, including binge frequency, restraint, treatment-seeking behavior, and personal concerns about eating, body weight, and shape. Although these differences suggest that differential actions by therapists might result in different outcomes, there is, as yet, no evidence that outcomes vary because of these differences.

### Summary

The influence of client demographic variables on outcome is mixed and inconsistent, possibly for many reasons. Attitudes toward age, gender, and race change with the times, and both patients and therapists will be influenced by the cultural atmosphere. The client's age, gender, ethnicity, and education are fixed variables to which the therapist must accommodate and adjust. There has been a growing recognition of the need in the field for training therapists in this accommodation process, and this ability is probably learned more directly from supervisors than from therapeutic manuals.

Demographic variables may be less important in themselves and are rather a marker for other related issues. For example, age is a marker for many aspects of clients' lives that are relevant to treatment planning. Age correlates with the development of the biological organism that unfolds during childhood to adolescence and declines during old age. Age correlates with the developmental and psychological tasks that an individual faces over a life span. Adolescents are establishing their own identity and making moves toward independence from the family of origin. Young adults are seeking intimate partners and beginning work careers. Middle-age adults are facing the tasks of satisfaction in intimacy and raising children. Advancing age brings issues of health, loss of loved ones, and diminishing activities.

Our society is attentive to issues of ethnic and cultural diversity. It is commonly taught now that the clinician must be attentive to the ethnic and cultural aspects of the client in order to form a fruitful therapeutic relationship. This orientation can be taken to an extreme form by calling for replication of all psychotherapy studies by diagnosis (EST literature) with all ethnic groups (Hall, 2001). This argument would be more convincing if there were signs that ethnic differences had a significant influence on treatment outcome

or that ethnic variables were related to the nature of the conditions being treated.

The most fruitful areas of future research involve those in which the nature and manifestations of the problem area or diagnosis are related to the demographic characteristics of the clients. The two best examples are those reviewed in this section relating to depression and eating disorders. The prevalence rate and the experience of depression are related to gender. Race may have an influence on the pattern of eating disorders. Future research is needed to examine not only the treatment prognosis but also the issue of prescriptive treatments for depression as related to gender.

### Personality Variables

Under the heading of diagnosis, we have previously considered the influence of personality disorders as defined in DSM on psychotherapy. Most reviewers consider the personality disorders to be an extreme of personality traits, with continuity between normality and disorders. In this section, we consider other personality traits as they influence the therapeutic encounter.

### Expectancies

There is a history of research relating client expectancies and therapy process and outcome (Frank, 1973). Paul and Shannon's (1966) work on systematic desensitization found that a positive expectancy condition yielded a better outcome than a no-treatment control. Frank (1961) considered the clients' confidence in his or her therapist and treatment to be the critical determinant of outcome. Client expectations of treatment were related to treatment duration (Lorr & McNair, 1964), attrition rates (Overall & Aronson, 1963), and outcome (Lennard & Bernstein, 1960). Gaston, Marmar, Gallagher, and Thompson (1989) found better outcomes for cognitive therapy clients who expected the treatment to work.

Client expectancies have a strong relationship to duration of treatment (Jenkins, Fuqua, & Blum, 1986) but an inconsistent relationship to treatment outcome (Beutler, Wakefield, & Williams, 1994). In a study of brief ambulatory psychotherapy (Joyce & Piper, 1998), client expectancies were associated strongly with the treatment alliance but only moderately related to treatment outcome. In the same study, client expectancy and a measure of quality of object relations combined in an additive fashion to relate to both alliance and outcome.

There is evidence that client expectancies and "difficulty" are related to therapist behavior

(Foley, O'Malley, Rounsaville, Prusoff, & Weissman, 1987) in delivering a manualized IPT treatment. Client difficulty as demonstrated in the therapy sessions was related to therapists' and supervisors' judgments of therapist performance; that is, therapists were seen as performing more poorly when clients were more difficult. Clients' pretreatment negative expectations about the outcome of therapy were associated with client difficulty, whereas level of presenting symptomatology was not.

### *Preparation for Change*

A number of constructs describe the client's own preparation for behavioral, attitudinal, and emotional change as it intersects with help-seeking behavior.

**READINESS TO CHANGE.** When the client makes a decision to seek therapy as a means of dealing with difficulties, to what extent is the client motivated to do what is necessary for change? Prior to coming for therapy, what efforts has the client made to make changes in order to overcome his or her difficulties? These basic questions have been examined extensively in relation to the issue of terminating the habitual and harmful behavior of smoking.

DiClemente and Prochaska (1982) described and assessed the frequency of 10 change processes in individuals who smoke. From this data set these investigators (Prochaska & DiClemente, 1983) described a series of five stages in the cessation of smoking: (1) precontemplation in which people are not intent on taking action, (2) contemplation in which people intend to take action, (3) preparation in which people intend to take immediate action, and finally (4) an action stage in which individuals make specific modifications in their behavior and (5) maintenance in which individuals take steps to avoid relapse to the undesired behaviors.

Addiction severity and frequency of smoking per day were significantly lower among those in the preparation stage than those in the precontemplation or contemplation stage (Crittendon, Manfredi, Lacey, Warnecke, & Parsons, 1994; DiClemente et al., 1991). During an intervention study, clients in the preparation stage made greater use of the intervention (as predicted) than did precontemplators or contemplators (DiClemente et al., 1991). In yet another study (Farkas et al., 1996), clients in the preparation stage were more likely to have stopped smoking one to two years

later compared to clients in the contemplation or precontemplation stages.

The stages of change have been applied to seven different systems of psychotherapy (Prochaska & DiClemente, 1983, 1984, 1985). The dropout rate from treatment for a variety of disorders such as substance abuse, smoking, obesity, and medication treatment for hypertension and HIV/AIDS has been related to stages of change (Medeiros, Prochaska, & Prochaska, in press; Prochaska, Norcross, Fowler, Follick, & Abrams, 1992). Stage-related variables were more powerful than demographic variables, type and severity of problems, and other client variables. Furthermore, this group has made the prediction that the amount of change during treatment and following treatment is significantly related to the stage of change at the beginning of treatment (Prochaska, DiClemente, & Norcross, 1992). A clinical corollary or principle stated by this group is that the treatment should be matched to the client's stage of change and that a mismatch between client stage and therapist strategies will result in resistance.

In a large clinical trial, four treatments were compared for 739 smokers (Prochaska, DiClemente, Velicer, & Rossi, 1993). The four treatments included a home-based cessation program, a stage-matched individual treatment, an expert system computer report plus manualized treatment, and finally counselors plus computer and manualized treatment. At 18 months the stage-based and matched programs were superior to the other treatments. Results are not always consistent, however. For example, Ziedonis and Trudeau (1997) evaluated stage of change among a large group of community mental health center clients with schizophrenia spectrum diagnoses and substance use disorders. Their results did not support the validity of the predictions concerning stage of change and involvement in substance abuse treatment or its outcomes. It appears that the stage strategy often is predictive and can be used to design interventions, but the majority of research is on habit disorders and must be investigated in other client problem areas.

### *Ego Strength*

An important factor known to affect treatment outcome is clients' ego strength (Kernberg et al., 1972; Sexton, Fornes, Kruger, Grendahl, & Kolseth, 1990; Sohlberg & Norring, 1989). Ego strength is defined as the presence of positive personality assets that enable an individual to toler-

ate and overcome his or her anxieties and to acquire new, more adequate defenses. According to Brown (1979, p. 184), "Ego-strength is also the client's capacity to hold on to his own identity despite psychic pain, distress, turmoil and conflict between opposing internal forces as well as the demands of reality." Consistent with these definitions, research has shown that those scoring high on ego strength measures are rated as better adjusted psychologically and show a greater capacity to cope with the stressors and problems in their life situations (Graham, 1990). Ego strength and similar concepts have also been generally found to be related to treatment outcome (Conte, Plutchik, Picard, & Karasu, 1991; Kernberg et al., 1972; Sexton, Fornes, Kruger, Gren-dahl, & Kolseth, 1990; Sohlberg & Norring, 1989). In the Menninger Psychotherapy Project, Kernberg et al. (1972) found a significant relationship between ego strength and outcome in psychoanalytically oriented psychotherapy ( $R(df=41) = .35, p < .05$ ). Exceptions to these findings include studies by Luborsky et al. (1980) and Endicott and Endicott (1964), both of whom found that the Barron's Ego Strength Scale was not significantly related to outcome. In addition, in the Columbia Psychoanalytic Center Project, clinical appraisals of ego strength were not significantly related to outcome (Weber, Bachrach, & Solomon, 1985). Whether ego strength influences particular aspects of the therapy process (i.e., formation of the therapeutic alliance and ability to obtain insight) or exerts direct effects on outcome is in need of further exploration.

### Psychological Mindedness

McCallum and Piper (1996) have reviewed the client construct of psychological mindedness, in terms of its definition, assessment, and relationship to outcome. Psychological mindedness (PM) refers to a person's ability to understand people and their problems in psychological terms. From a psychodynamic perspective, PM refers to the ability to identify components of intrapsychic conflict. There are self-report measures of psychological mindedness, including a subscale of the CPI, a self-consciousness scale (Fenigstein, Scheier, & Buss, 1975), and clinical interviews, including the psychological-mindedness assessment procedure developed by these authors.

Baer, Dunbar, Hamilton, and Beutler (1980) factor analyzed therapist ratings of process items and found that a patient's demonstration of higher levels of insight and self-disclosure was related to

treatment outcome. The Psychotherapy Research Project of the Menninger Foundation failed to find any significant relationships between ratings of psychological mindedness and outcome. In a comparative outcome study, Piper, Debbane, Bienvenu, and Garant (1984) found that psychological mindedness was significantly related and directly correlated with client outcomes in a short-term group therapy but was not predictive of outcome in the other three forms of therapy studied (long-term individual therapy, long-term group therapy, and short-term individual). In a controlled trial of an interpretive form of short-term group therapy, PM was directly related to remaining and working in groups but not to deriving benefit from them (Piper, McCallum, & Azim, 1992). In a day treatment trial, however, PM was directly related to both working and benefiting. The authors hypothesize that clients with higher levels of PM are better able to work and benefit in interpretive therapy in which internal conflicts are explored repeatedly, and, conversely, clients with lower levels of PM are better able to work and benefit in supportive therapy in which internal conflicts are not explored.

**ANALYTIC-INTROJECTIVE DISTINCTION.** Blatt et al. (1994) found that in long-term treatment, clients who were predominantly introjective (perfectionistic and self-critical) had generally better outcomes than clients who were predominantly anaclitic (concerned with abandonment and loss). In using the perfectionism subscale of the Dysfunction Attitude Scale (DAS) as an analogue for introjective style, it was found that pretreatment perfectionism had a significant negative impact on therapeutic outcome across treatment conditions (Blatt, Quinlan, Pilkonis, & Shea, 1995). The distinction between anaclitic and introjective clients was also applied to a further analysis of data from the Menninger Psychotherapy Research Project (MPRP). Findings indicated that anaclitic and introjective clients are differentially responsive to psychotherapy and psychoanalysis. Anaclitic clients had significantly greater improvement in psychotherapy than they did in psychoanalysis. In contrast, introjective clients had significantly greater improvement in psychoanalysis than in psychotherapy.

### Interpersonal Variables

#### Interpersonal Relatedness

One of the most frequently studied client factors is the client's quality of relating in interpersonal

relationships (Luborsky, Barber, & Beutler, 1993). Interpersonal relatedness has been conceptualized in a variety of ways by a number of investigators from different theoretical orientations. Some investigators have assessed the history of interpersonal relationships, whereas other investigators have examined interpersonal functioning in current close relationships or have assessed clients' perceptions, beliefs, and wishes about relationships. Others have looked at how the client relates to the therapist during the therapy.

A number of investigators have demonstrated significant relationships between the pattern of a client's pretherapy interpersonal relationships and the therapeutic alliance established during treatment (Luborsky, McLellan, Woody, O'Brien, & Auerbach, 1985; Marmar, Weiss, & Gaston, 1989; Piper, Azim, Joyce, & McCallum, 1991). The findings in this area are somewhat mixed. Piper et al. (1991) found that the greater the disturbance between a client and his or her partner, the better the alliance established with the therapist. Those clients who were emotionally needier established longer term relationships, compared with those participants who did not seem to have such needs and stopped treatment prematurely. In addition, disturbance with one's partner is but one aspect of problems in interpersonal relationships, thus turning the client more toward an important positive alliance with the therapist. In contrast, in an uncontrolled followup study of 84 clients treated with individual psychoanalytic psychotherapy, the capacity to be related was significantly predictive of positive outcome (Clementel-Jones, Malan, & Trauer, 1990). These findings are also consistent with those of Alpher, Peretto, Henry, and Strupp (1990), who found a significant positive relationship between clinician ratings based on clinical interviews of clients' capacity to engage in short-term dynamic psychotherapy and clinical outcome as assessed on the Rorschach test. Moras and Strupp (1982) also found that good pretreatment interpersonal functioning predicted a good alliance, but they did not find that poor interpersonal functioning predicted a poor alliance. On the other hand, consistent with Piper's findings, Walters, Solomon, and Walden (1982) report that clients who remained in treatment were more poorly adjusted than those who terminated prematurely.

It is plausible that clients with disturbed interpersonal functioning are nevertheless so dependent and needy of interpersonal relationships that they continue to stay in therapy despite problems expressing their needs and difficulties in

their personal relationships. Correspondingly, those who drop out prematurely may do so because they have lower needs for closeness and intimacy, regardless of whether or not they have better overall interpersonal relationships or are better at denying interpersonal conflicts. Along these lines, in a 15-month followup assessment of clients at a long-term psychoanalytically oriented treatment facility, Blatt, Ford et al. (1994) found that those clients who made substantial clinical progress (defined as less frequent or less severe clinical symptoms and more intact social behavior) had produced more disrupted and malevolent interpersonal interactions on the Rorschach in their initial intake assessment. The authors suggested that clients who are more open about their disturbed interpersonal relationships are more likely to enter actively into therapy and to gain most from the treatment process.

### *Quality of Object Relations*

Interpersonal relatedness has also been conceptualized in terms of the quality of object relations. Quality of object relations refers to a person's lifelong pattern of relationships and their characteristic way of interpreting social information. The quality of object relations is believed to be a dimension ranging from immature to mature levels of relatedness. In a comparative psychotherapy study, the therapist's rating of quality of object relations was directly related to favorable process and outcome in an interpretive form of short-term individual therapy (Piper, de Carufel, & Szkrumelak, 1985). In a controlled trial of interpretive, short-term individual therapy, quality of object relations was directly related to the therapeutic alliance and favorable outcome (Piper et al., 1991). These findings are consistent with those reported by Horowitz, Marmar, Weiss, DeWitt, and Rosenbaum (1984) in a study of brief individual therapy. In addition, in a controlled trial of intensive day treatment, which involved an integrated set of interpretive and supportive forms of group therapy, quality of object relations was directly related to remaining in and benefiting from treatment (Piper, Joyce, Azim, & Rosie, 1994). The authors conclude that clients with higher levels of Quality of Object Relations are better able to tolerate, work with, and benefit from the more demanding aspects of interpretive therapy, and, conversely, clients with lower levels of quality of object relations are better able to work with and benefit from the more gratifying aspects of supportive therapy.

### *Attachment*

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### *Attachment Patterns*

Since psychotherapy involves the creation and use of a relationship between two or more individuals (i.e., client and therapist, client, spouse/family and therapist), it is plausible that the clients' history of attachments to others and the quality of these attachments will have a predictive effect on the process and outcome of treatment. Following the seminal work by Bowlby (1969, 1980, 1988) and Ainsworth (1964) on the attachment between infants and their mothers, the construct of attachment has been examined in relation to adult behavior. The attachment behaviors of infant to the caregiver under situations of stress may be analogously related to the situation of a client in distress seeking a help-giving relationship with a therapist. The nature of attachment or attachment styles has been described as secure, anxious-ambivalent, anxious-avoidant, and disorganized (Bowlby, 1988).

In a treatment study of clients diagnosed with borderline personality disorder, those clients classified with the Adult Attachment Interview (AAI) as insecure-dismissive evidenced the best response to intervention compared to other attachment groups (Fonagy et al., 1996). In a naturalistic treatment study of outpatients with a variety of Axis I disorders (e.g., affective, anxiety, substance abuse), Meyer, Pilkonis, Proietti, Heape, and Egan (2001) rated attachment prototypes following an interview using a procedure described by one of the authors (Pilkonis, 1988). It was found that secure attachment style in contrast to various insecure attachments was associated with fewer symptoms prior to the initiation of treatment and with greater improvement following treatment.

Since both attachment style and quality of object refer to relationships with others in the client's life rather than with the current therapist, these constructs may have effects on the treatment process and/or outcome through more immediate mechanisms, including client expectancies and elicitation of helpful versus harmful responses from the therapist (Meyer et al., 2001). There is evidence that this might be the case. Individuals characterized by secure attachment perceive themselves to be competent in relationships and expect a positive response from others (Bartholomew, 1997; Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994). Dozier (1990) found that dismissing patients are often resistant to treatment, have difficulty asking for

help and retreat from the help that is offered. Dismissing individuals often become disorganized when they are confronted with emotional issues in therapy (Dozier, Lomax, & Tyrrell, 1996).

Satterfeld and Lyddon (1998) found that security of attachment was related to positive scores on the goals subscale of the Working Alliance Inventory (WAI; Horvath & Greenberg, 1986). Eames and Roth (2000) found that patient attachment orientation was related to the development of a therapeutic alliance during the early stages of therapy. Attachment status was also related to the frequency of therapeutic ruptures. Security of attachment was related to higher therapist-rated alliance, and fearful avoidance was related to lower levels of alliance. Interestingly, the preoccupied attachment dimension was related to low alliance at the beginning of treatment but higher alliance toward the end of treatment. These findings, taken together, suggest that anxiety about attachment and avoidance of intimacy may act to impede the development of a therapeutic alliance. However, regardless of high levels of anxiety about relationships, the strong drive of highly preoccupied individuals for intimacy might enable them to develop a better alliance as therapy continues. Surprisingly, Eames and Roth (2000) also found that dismissing attachment was related to positive changes in alliance during the course of therapy. Malinckrodt, Gantt, and Coble (1995) also found a subgroup of patients they called reluctant, who reported good alliances on the WAI but endorsed an unwillingness to participate in the self-revealing tasks of psychotherapy on the Client Attachment to Therapist Scale. These authors suggested that the reluctant cluster might correspond to the dismissing category.

Patient attachment may also influence alliance by influencing therapist response. Dolan, Arnkoff, and Glass (1993) found evidence to suggest that therapist and client attachment styles were interdependent and that ratings of working alliance were contingent on perceptions of therapist-client differences. Hardy, Stiles, Barkham, and Startup (1998) examined responses to patient attachment patterns and found that therapists tended to adopt more affective and relationship-oriented interventions in response to clients with overinvolved-preoccupied interpersonal styles and used more cognitive interventions with patients characterized as underinvolved-dismissing.

Patients in treatment with therapists who were dissimilar from them on the hyperactivat-



ing/deactivating dimension of attachment on the Adult Attachment Interview (AAI) showed better therapeutic outcomes and stronger therapeutic alliances (Dozier, Cue, & Barnett, 1994; Tyrell, Dozier, Teague, & Fallot, 1999). Clinicians classified as secure/autonomous on the AAI tended to challenge the patient's interpersonal style (whether deactivating or hyperactivating), while clinicians classified as insecure on the AAI were more likely to complement the patients' interpersonal style (Dozier et al., 1994; Tyrell, Dozier, Teague, & Fallot, 1999). Patients treated by clinicians classified as secure on the AAI have the best outcomes when the clinician is at the opposite side of the secure/autonomous continuum from the patient's AAI classification (e.g., the patient is rated Preoccupied on AAI, and the therapist is rated on the dismissing end of the autonomous category (F1, F2) (Dozier et al., 1994).

Diamond and colleagues (Diamond et al., 1999) reported findings from two clients with borderline personality disorder treated in Kernberg's transference-focused psychotherapy (Clarkin, Yeomans, & Kernberg, 1999) by the same therapist. Both clients progressed from insecure to secure states of mind regarding attachment with one year of treatment. However, consistent with previous research (Eames & Roth, 2000; Dolan, Arnkoff, & Glass, 1993; Dozier et al., 1994; Mälinckrodt, Gantt, & Coble, 1995; Tyrell et al., 1999), each patient interacted and affected the therapist in very different ways, and the therapist responded to each patient very differently. The therapist was engaged and active in the treatment of the client initially classified as preoccupied, whereas the same therapist was much less engaged, often felt dismissed, and developed a much weaker therapeutic bond with the other client.

### *In-Therapy Behavior*

In many studies, clients' characteristics are measured with paper and pencil assessment instruments or are determined through semistructured interviews. A more direct test of clients' characteristics is to assess the clients' behavior during the therapy itself, such as their contribution to the therapeutic alliance and involvement in the treatment process.

**CLIENT PARTICIPATION.** Gomes-Schwartz (1978) analyzed process ratings from taped segments of therapy sessions and found that the feature most consistently predicting outcome was client willingness and ability to become actively involved in

the therapy. In addition, O'Malley, Suh, and Strupp (1983) found that client involvement correlated significantly with all measures of outcome in the Vanderbilt Psychotherapy Outcome Study. Nelson and Borkovec (1989) found that canonical correlations of participation correlated with change on pre-post outcome measures.

**THERAPEUTIC ALLIANCE.** Client characteristics such as the ability to form an alliance with the therapist and initial functioning also proved important in predicting treatment outcome. Research has indicated that the clients' contribution to the therapeutic alliance is related to therapy outcome (Horowitz, Marmar, Weiss, DeWitt, & Rosenbaum, 1984; Marziali, Marmar & Krupnick, 1981). Krupnick et al. (1996) found that mean therapeutic alliance, assessed in the third, ninth, and fifteenth sessions, was significantly related to outcome across treatment groups. This relationship was determined primarily by the contributions of the client rather than by the therapist to the therapeutic alliance. Using the Vanderbilt Psychotherapy Process Scale (VPPS), Windholz and Silberschatz (1988) found that the clients' involvement in the relationship and the therapist-offered relationship were significantly correlated with the therapist's rating of outcome in a brief psychodynamic therapy.

With 86 clients manifesting anxiety, depression and personality disorders, alliance significantly predicted subsequent change in depression when prior change in depression during the treatment was partialled out (Barber, Connolly, Crits-Christoph, Gladis, & Siqueland, 2000). The authors suggest that their design and findings advance the research question in this area from whether therapeutic alliance during the first few weeks of psychotherapy predicts outcome to the question of the nature of the intertwined and sequential relationship between alliance and clients' improvement.

### *Summary: Interpersonal Behavior*

Psychotherapy involves an interpersonal process between client and therapist. The clients' past interpersonal relationships and current ability to form a positive and fruitful relationship with the therapist are, on the face of it, quite relevant to the continuation and success of the therapy. This situation is, in some ways, a dilemma, in that many symptomatic individuals with disorders needing treatment are the same ones who have troubled interpersonal relations that may

disrupt the therapeutic venture. Research support for the importance of these variables is abundant in the literature despite differing operationalizations and diverse treatment methods. Therapists must be experts in fostering relationships with individuals who have difficulty doing so.

### Search for a Set of Client Characteristics

It is quite plausible that single-client variables will not prove to be as important to the treatment process and outcome as a set of interrelated client variables. Several teams of researchers have searched in different ways to find sets of client variables that have implications for outcome.

#### *Client Variables across Problem Areas/Diagnoses*

One of the most systematic and concerted efforts to isolate a set of specific client variables and demonstrate their influence on the course and outcome of treatment has been the work of Beutler and his colleagues. Beutler, Clarkin, and Bongar (2000) have recently documented the steps in identifying salient client characteristics that are potentially related to treatment process and outcome. First, comprehensive reviews of treatment studies were utilized to describe client characteristics (Beutler, 1979; Beutler & Berren, 1995; Beutler & Clarkin, 1990; Beutler, Consoli, & Williams, 1995; Beutler, Goodrich, Fisher, & Williams, 1999; Beutler, Wakefield, & Williams, 1994; Gaw & Beutler, 1995). Second, based on an extensive list of client variables, an attempt was made to extract the more trait-like characteristics that might have an enduring impact on the treatment process and outcome across time. This was followed by an attempt to relate these trait-like client variables to differential aspects of the pharmacological and psychosocial treatments employed. Since this chapter focuses almost entirely on client variables, we will provide an examination of treatment modifiers that were isolated to optimally match the client and treatment interactions. The interested reader can pursue a more complex analysis in Beutler, Clarkin, and Bongar (2000) as well as in Chapter 7 of this volume. Finally, Beutler and colleagues developed methods for assessing the client variables and conducted a predictive validity study using these client variables to predict treatment outcome (Beutler, Moleiro, Malik, & Harwood, 2000).

The six client variables identified and selected for investigation out of a large number of potential candidates included: (1) client functional

impairment, (2) subjective distress, (3) social support, (4) problem complexity/chronicity, (5) client reactance/resistance, and (6) coping styles. These variables relate to the client's problems and psychopathology (complexity/chronicity, functional impairment), to the characteristic ways in which the individual responds to difficulty (subjective distress, reactance/resistance, coping styles), and to the nature of the client's interpersonal context (social support).

Two client variables—functional impairment and complexity/chronicity of problems—relate directly to the client's problems, illness, and/or psychopathology. Complexity may be defined as comorbidity (i.e., coexisting diagnosable symptom or Axis I disorders and/or coexisting Axis II or personality pathology) and the duration of the difficulties (i.e., the chronicity, frequency, and extent of recurrence). There is evidence that greater problem complexity calls for more complex and broadband treatment. For example, situation-specific problems, as opposed to chronic and recurrent problems, have been found to be more responsive to behavioral treatments. This seems to be true for those with mixed somatic symptoms (LaCroix, Clarke, Bock, & Doxey, 1986), alcohol abuse (Sheppard, Smith, & Rosenbaum, 1988), eating disorders (Edwin, Anderson, & Rosell, 1988), and chronic back pain (Trief & Yuan, 1983). On the other hand, there is little evidence of the superiority of more complex, conflict-focused interventions for clients with more complex difficulties.

Functional impairment is the observed or rated degree of impairment in daily functioning. The literature is often unclear concerning the cause and effect or even the temporal relationship between symptomatic status and functional impairment, although it is often assumed that symptom status leads to various degrees of functional impairment. Even among medical diseases, however, the degree of functional impairment may vary substantially, even in individuals with the same medical pathology or psychiatric condition. Reviews indicate that level of functional impairment is negatively correlated with prognosis across disorders such as depression (Gitlin, Swendsen, & Heller, 1995; Kocsis et al., 1988; Sotsky et al., 1991), bulimia nervosa (Fahy & Russell, 1993), obsessive-compulsive disorder (Keijsers, Hoogduin, & Schaap, 1994), and chemical dependency (McLellan, Woody, Luborsky, O'Brien, & Druley, 1983). If one regards disturbed object relations (Joyce & Piper, 1996) and comorbid

personality disorders among substance abusers (Woody et al., 1984) as indications of functional impairment, these have been found to relate negatively to psychodynamic treatment outcome.

Three client variables—subjective distress, reactance/resistance, and coping styles—describe the way the individual deals with problems and symptoms and thus might be important client variables predicting psychotherapy outcome. Subjective distress refers to the client's internal state rather than objective behavior or performance, and clinically it is assumed that this internal state would have motivational properties. There is modest support for the assumption that subjective distress is motivational. There is also support for the assumption that psychosocial treatment has its greatest effects on those clients with moderate to high levels of subjective distress (Klerman, Dimascio, Weissman, Prusoff, & Paykel, 1974; Lambert & Bergin, 1983; McLean & Taylor, 1992). In the NIMH Collaborative Study of Depression, those clients with the most severe distress were most effectively treated by IPT, whereas IPT and CBT worked well for those with mild and moderate distress (Elkin, 1994; Elkin, Gibbons, Shea, & Shaw, 1996; Imber et al., 1990).

Since psychotherapy is a situation in which the client can potentially learn from the therapist, the client's receptivity to information, direction, advice, and interpretation from the therapist may be crucial to treatment success. Reactance is a construct defined by describing the behavior of an individual who responds in oppositional ways to perceived loss of choice (Brehm, 1966, 1976; Brehm & Brehm, 1981). Reactance theory is a thoughtful discussion of instances in which thoughts and behavior are free and unimpeded as compared to instances of reactance in which an aversive motivational state occurs and autonomous behavior is threatened. Brehm (1976) suggested that reactance might occur in psychotherapy in instances where the client attempts to avoid the influence of the therapist. Psychodynamic therapy has often been conceptualized as an effort to understand and interpret the resistance of the client. Others in a more cognitive and behavioral tradition have suggested that reactance can not only be dealt with, but also utilized in the therapeutic encounter (Tennen & Affleck, 1991; Tennen, Eron, & Rohrbaugh, 1985; Tennen, Rohrbaugh, Press, & White, 1981) to enhance outcome. Reactance and resistance involve a number of client behaviors and attitudes that describe a range of behaviors from simple non-

compliance to delayed compliance to oppositional behavior in the face of the therapist's authority. It is quite likely that therapeutic impasses as defined by Safran and Muran (2000) often involve instances that could be conceptualized as reactance between client and therapist, thus stimulating the investigation of how to manage and/or utilize these situations.

Client resistance has been shown to be associated with poor prognosis with psychotherapy (Bischoff & Tracey, 1995; Miller, Benefield, & Tonigan, 1993; Stoolmiller, Duncan, Bank, & Patterson, 1993). A direct approach to these situations is that of Shoham-Salomon, Avner, and Neeman (1989). Reactance was measured as a pretreatment variable by the client's content-filtered tone of voice. In a treatment utilizing paradoxical interventions, those with higher pretreatment reactance benefited more from the therapy than those with lower reactance scores. A self-report measure of reactance (Dowd, Milne, & Wise, 1991) was significantly correlated with traits such as dominance, independence, autonomy, denial, self-sufficiency, lack of tolerance, and lack of conformity. In yet another study (Shoham, Bootzin, Rohrbaugh, & Urry, 1996), the role of reactance and treatment for insomnia was examined. It was found that paradoxical interventions were more effective for the high-reactance clients than for the low-reactance clients and that progressive muscle relaxation treatment was more effective for low-reactance clients.

Beutler and colleagues define coping style as the conscious and unconscious behaviors that are designed to enhance the individual's ability to avoid the negative effects of anxiety and to adapt to the environment. There is a body of literature that grossly divides coping styles into those that are externalizing (e.g., impulsivity, projection, sociopathic behavior) and those that are internalizing (e.g., obsessiveness, inhibition, inner directedness, and restraint). Clients at varying levels of externalizing and internalizing respond differently to various treatments. For example, among alcoholic subjects, individuals high and low on externalization/impulsivity responded differently to behavioral and interpersonal treatments. The externalizing clients did better when treated with behavioral treatments, and the introspective ones did better with an interpersonal therapy. Similarly, Longabaugh et al. (1994) found that alcoholics who were externalizing responded better to cognitive behavioral treatment than they did to relationship enhancement therapy. These results

were not replicated in the large-scale Project MATCH (1997), which we described elsewhere in this chapter. Among a group of outpatients, cognitive therapy was more effective than interpersonal therapy among clients who were externalizing, and interpersonal therapy was most effective for the internalizing clients (Barber & Muenz, 1996).

Although the clients' social support is in some ways external to the client, it also seems clear that clients play a major role developing (or destroying) a social support network composed of friendships, work, and other relationships. Social support is a summary statement about the interpersonal context within which the individual operates and has been found to be a potent variable in treatment outcome. Social support has been measured as both the objective presence of others in the environment and the subjective sense that support is available. There is ample evidence that social support, especially the subjective sense of support, provides a buffer against relapse and improves prognosis (George, Blazer, & Hughes, 1989; Hootley & Teasdale, 1989; Longabaugh, Beattie, Noel, Stout, & Malloy, 1993; Moos, 1990; Zlotnick, Shea, Pilkonis, Elkin, & Ryan, 1996).

### *Sets of Client Variables and Generalized Anxiety Disorder*

Borkovec (Borkovec & Miranda, 1999) has examined client variables in relationship to the successful treatment of individuals with generalized anxiety disorder (GAD). Given the presence of GAD, these researchers have studied client characteristics relevant to the disorder itself, including attention, thought, imagery, emotional psychophysiology, and their interactions. For example, at the physiological level, GAD is characterized by autonomic inflexibility due to a deficiency in parasympathetic tone. Thought content characterized by worry reduces parasympathetic tone. In addition, threatening words generate a defensive response in these clients, serving as an unconditional stimulus that leads to an orientation to associated conditional stimuli. At the level of interpersonal behavior, these clients have been found to be different from controls in their attachment-related childhood memories. On the Inventory of Interpersonal Problems (IIP), a self-report measure of areas of interpersonal difficulties, there are three different subtypes: (1) overly nurturant and intrusive in their interpersonal relations, (2) socially avoidant and unassertive, and (3) dominant and hostile. The authors point out that all of

these client variables are relevant for differential treatment planning with GAD individuals.

### **Aptitude by Treatment Interaction Research**

Reviews of psychotherapy research (Kopta, Lueger, Saunders, & Howard, 1999) often conclude that there is no evidence supporting the attractive notion that the individual client should be matched to a particular treatment tailored to that client's difficulties and other characteristics. However, the counterargument is that most psychotherapy studies lack sufficient power to examine potential matches between client and psychotherapy. In addition, clinicians work on the assumption that clients should be matched to particular psychotherapies and aspects of psychotherapy and therefore miss important relationships. The research corollary of the clinical attempt to guide treatment selection on the basis of client variables is a design that assesses the interactions of the treatment type or condition with the client variables, so-called aptitude by treatment interaction (ATT) research (Cronbach, 1975).

Smith and Sechrest (1991) have emphasized the design requirements for a fruitful exploration of appropriately matching clients according to certain aptitudes with specific treatments. They warn that ATIs may be infrequent, undependable, and difficult to detect. The treatment of alcohol and drug addictions has drawn a number of attempts to specify ATIs.

Probably one of the most extensive attempts to match client to treatment was done in Project MATCH, involving individuals with alcoholism who were treated with one of three treatments (Connors et al., 2000). For outpatients, ratings of alliance were positively predicted by client age, motivational readiness to change, socialization, and level of perceived social support. Client educational level, level of depression, and meaning seeking were negatively related to alliance. Among aftercare clients, alliance was positively predicted by readiness to change, socialization, and social support, and negatively predicted by level of depression. However, of the variables manifesting positive relationships with alliance, only a few were significant predictors in multiple regression equations. For outpatients, client age and motivational readiness to change were positive predictors, whereas education was a negative predictor of ratings of alliance.

In reference to matching clients to treatments as related to outcome (Project MATCH

Research Group, 1997b), 11 client attributes were examined. Alcohol-dependent outpatients, high in anger and treated in motivational enhancement therapy, had better post-treatment drinking behavior than an analogous group treated with Cognitive Behavioral Coping Skills Therapy (CBT). Aftercare clients high in alcohol dependence had better post-treatment outcomes in Twelve-Step Facilitation Therapy, and low-dependent clients did better in CBT.

A less developed, yet ambitious, project has been reported by Beutler, Moleiro, Malik, and Harwood (2000) to test the effects of a Prescribed Therapy against competing therapies for a mixed group of clients with substance abuse and depression. The prescriptive treatment focused on tailoring the treatment to four salient client characteristics (described earlier in this chapter): level of functional impairment, internalized or externalized coping, level of reactance, and level of distress. The prescribed treatment matched treatment and therapist characteristics to each of these four client variables: level of functional impairment modified the intensity of treatment, coping was matched to focus on meaning or behavior; reactance was matched with therapist directiveness; and distress was matched to therapist support or arousal techniques. A hierarchical analysis suggested that the fit of client and therapist across the three treatment conditions made a modest contribution to predictive power at the end of treatment and a large contribution at the end of a six-month followup period. Much more work is needed, but this research was generated by the plausible yet infrequently researched notion that the therapist should adapt to client variables. This approach is creative and refreshing as compared to the dominant research theme today of matching the client on only the diagnosis variable to treatments conceptualized in terms of theory and school of psychotherapy.

### Summary

The ATI design has been used infrequently, despite its design benefits. One of the reasons might be that theoretical models may not be sufficient to use ATIs, inasmuch as the basic research on the pathology must be done first. Also, they require the time and expense related to gather information on a large number of clients. The finding of the ATI research to date has been relatively disappointing, and Project Match is a prime example. The model of the addiction pathology may have been limited, and therefore the client

variables chosen were not central to the pathology itself. Further research is needed before abandoning more complete study of client variables and their contribution to outcomes within this paradigm.

### Conclusions and Implications

1. The field of psychotherapy research has crystallized around the randomized clinical trial for clients "homogeneous" for a particular DSM-IV diagnosis. This research, furthered by NIMH and its funding, has been characterized as a Food and Drug Administration approach (Pilkonis & Krause, 1999), with its goal of establishing the evidence of treatment safety and efficacy in at least two clinical trials. This approach fosters internal validity and provides little consideration of clinical significance. The focus is on treatments, with little attention to patients, therapists, or individual differences. The yield of this orientation is group outcomes reflected in group mean scores, with no attention to mediators and moderators of outcome. This research concentration has led to the "empirically validated treatment" movement, which argues that the matching of the client variable of diagnosis with a particular treatment should be preferred in clinical practice and should be included in the training of clinical psychologists.

In contrast, we argue that it is precisely this kind of oversimplification that leads to the gap in understanding and information exchange between researchers and practitioners. Everyday clinical reality is one in which the diagnosis is only one of many client variables that must be considered in planning a treatment intervention. Nondiagnostic client characteristics may be more useful predictors of psychotherapy outcome than DSM-based diagnoses. The diagnostic categories allow for too much heterogeneity in personality traits to serve as useful predictors or matching variables. Psychotherapy research designs should, therefore, stress the interaction between client diagnosis and other salient client characteristics with intervention strategies.

2. If one abandons the simplistic notion that assessment of client diagnosis alone provides a clear road to treatment, one is faced with an overwhelming number of client variables to consider. It is impossible to adequately research all these variables in either post-hoc analysis of treatment studies focused on the brief treatment of symptom diagnostic constellation, or in planned

prospective studies of nondiagnostic client variables. This review is an attempt to bring some order and perspective on the client variables that have shown promise thus far. The field has progressed from an early focus on client demographic variables to a focus on personality traits/disorders, especially those that are related to the nature of the disorder itself.

3. Single-client variables do not operate alone, as the individual client is a complex integrated person. Thus, research focused on a constellation of salient variables will be likely to show the greatest impact on treatment process and outcome. The work of Beutler and colleagues, Piper and colleagues, and Borkovec are exemplary in this regard.

4. Unfortunately, most of the research on nondiagnostic client variables involves a post-hoc analysis of the impact of various client variables on the outcome of interest. The examination by Sotsky and colleagues of the multisite NIMH collaborative depression study is an example of this type of investigation. It is interesting to contrast this approach with the theory-driven approach of Blatt and colleagues to the same data set. Although both approaches are informative, the field will be likely to make more progress if the latter direction with theory-guided inquiries is used. A further methodological progression is to investigate either individual or sets of nondiagnostic client variables in a prospective study. The work of Shoham-Salomon and the MATCH studies are prime examples. The most creative approach to date is to articulate areas of client variability that are likely to have the most powerful effect on treatment process and outcome, and to match the therapist behavior, regardless of school of psychotherapy, to the needs of the client (Beutler, Moleiro, Malik, & Harwood, 2000). It is in this work that the focus on client variables in interaction with therapist variables rather than looking at isolated variables is brought center stage and hopefully will result in more progress.

5. Currently, a major research concern is to extend efficacy research that is conducted on highly selected clients at research centers with carefully selected therapists to research that evaluates the effectiveness of specific therapeutic approaches to a more heterogeneous group of clients in the local community treated by community therapists. We agree that the central question of the generalizability of results from the somewhat pristine circumstances to the more heterogeneous community setting is a crucial

one. An essential issue in this transfer has to do with client variables. In an efficacy study, efforts are made to limit and control client and therapist variability. Studies that are aimed at generalizing results will enhance the likelihood of improving outcomes for clients.

6. Most reviews of client variables in relationship to psychotherapy process and outcome are pessimistic because of the inconsistent and less than clear relationships described in the literature (Garfield, 1994; Petry, Tennen, & Affleck, 2000). Such reviews, including this one, must come to terms with this inconsistency in results. There have been a number of plausible problems in past approaches to client variables:

First, as emphatically stated by Smith and Sechrest (1991), a number of design issues must be addressed in order to provide a research setting in which client aptitude by treatment interactions can be detected, including sufficient numbers of subjects, a clear and theoretically sound articulation of mechanisms of change, and a strong treatment that is of sufficient duration and intensity to bring about change.

Second, pretreatment client variables have a plausible impact on the therapy, but as soon as therapy begins, the client variables are in a dynamic and ever changing context of therapist variables and behavior. There is a growing awareness and articulation of the inherent interactive nature of psychotherapy such that pretreatment client variables will have only a modest and often inconsistent relationship with therapy process and outcome. The therapist's responsiveness to client variables and behavior will determine the statistical relationship of the client variable to outcome (Stiles, Honos-Webb, & Surko, 1998).

Third, client variables can function in different ways. Most of the research has attempted to isolate single-client variables that have a prognostic relationship to therapy process or outcome. Often, reviews are tallies of which studies are positive and which ones are negative on a single-client variable. Often they are post-hoc client variables of convenience rather than theoretically driven explorations. There is often no clear rationale as to whether the client variable is a mediator or moderator. These variables are treated as mediators or moderators based on their characteristics, for example, gender or age.

It is important to determine, both theoretically and statistically, whether a particular client variable operates as a mediator, a moderator, or

both (see Whisman, 1993). Mediating variables are not independent of moderator variables, and vice versa. Whisman also points out that the degree of mediation for a particular variable may be contingent on the level of a given moderator. James and Brett (1984) called this model "moderated mediation." Moderated mediation may be one reason previous research has often found contradictory results in regard to the relationship of client variables to outcome.

To the extent that a mediating variable is also a moderated variable, it becomes a prescriptive variable. For example, in the NIMH treatment of depression study, severity of illness is not only a prognostic variable but becomes a prescriptive variable because the most severely depressed clients responded to IPT and medication plus clinical management. Furthermore, the work of Borkovec implies that diagnosis is a prescriptive variable but only to the extent that it is moderated by important client variables related and specific to the diagnosis under question.

The individualized and more general characteristics of the clients who come for psychotherapy are central to the clinical enterprise of psychotherapy practice and the research investigation of psychotherapy. The focus of psychotherapy is on the clients' problem and diagnosis. Diagnosis is a statement based on common elements among many individuals, whereas an individual client's problem approaches a statement about the specific difficulties that are woven into the fabric of an individual's life at one point in time. Client characteristics are central to motivation for and the nature of participation in psychotherapy. Motivation for change and participation in treatment is individualized in the interaction between a particular therapist and a particular client. Client characteristics that are relevant to interpersonal processes are paramount in understanding the road to treatment outcome. The progress of psychotherapy and its research will depend directly on our efforts to further the exploration, understanding, and measurement of clients who seek our assistance with the difficulties they face.

## FOOTNOTES

1. The words *client*, *patient*, and *consumer* are used differently by various professional groups. In this chapter, we use the convention of *client*, even though psychotherapy is now planned, paid for, and researched according to a DSM diagnosis inferring patient status. We would point out that all three

terms infer a relationship with another: a client is under the protection of or receiving professional advice from an advisor; a patient is suffering from an illness and receives care from a doctor; and a consumer buys services from his or her insurance plan and a managed care provider.

2. Managed care is very interested in identifying individuals who, in their minds, do not need therapy. The concept of medical necessity is employed to limit the payment for therapy. We have found no research on the use of the concept of medical necessity.

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