THERAPIST TRAINING AND CLIENT CHARACTERISTICS AS PREDICTORS OF TREATMENT RESPONSE TO GROUP THERAPY FOR DEPRESSION

Kurt D. Baker
San Jose State University
Robert A. Neimeyer
University of Memphis

Although psychotherapists routinely make decisions about how to match treatment to a particular client, these decisions are typically guided by something other than empirical knowledge. Two variables that have shown promise in matching treatments to clients are psychological reactance and externalizing coping styles. The current study explored the relationship of these 2 client characteristics to response to 2 types of group therapies for depression—group cognitive–behavioral therapy and mutual support group therapy—led by 2 types of leaders: professionally trained and paraprofessional. Hypotheses regarding interactions of client characteristics and treatment type were not supported. However, an interaction of therapist training level with clients' coping style emerged, indicating that, regardless of the type of treatment provided, clients with a more externalizing coping style fared better when treated by paraprofessionals than by professionals, whereas those with a more internalizing coping style gained more from treatment with professionally trained therapists than paraprofessionals. These results suggest that attention must be given to therapist characteristics if research is to contribute to a model of systematic treatment selection.

Although Eysenck's (1952) original challenge sparked considerable debate regarding the effectiveness of psychotherapy, it is now generally accepted that psychotherapy does indeed reduce people's level of distress relative to those who receive no treatment (Lambert & Bergin, 1994; Smith, Glass, & Miller, 1980). However, because psychotherapy outcome studies compare averages between groups and there is typically wide variation in the scores making up those averages, one can still reasonably pose the question, “For whom is psychotherapy most effective and for whom is it least effective, ineffective, or even harmful?” Although we know that psychotherapy improves people’s condition generally, we do not know how psychotherapy affects clients’ condition differentially. More specifically, we do not know which psychotherapy affects various clients in different ways. This differentiation of which client characteristics are predictive of successful treatment is crucial to the progress
of understanding the phenomenon of psychotherapy. In a related vein, relatively little is known about how therapist variables (e.g., level of training) interact with client characteristics to enhance or mitigate treatment outcome (Beutler, Machado, & Neufeldt, 1994; Garfield, 1994), precluding an empirically informed matching of client to therapy or therapist.

Our purpose in this study was to examine client characteristics as predictors of outcome based on the type of treatment provided and by whom it was delivered. More specifically, we examined the interaction of two theory-based client characteristics—psychological reactance and coping style—with two types of group psychotherapy for depression provided by either professionally trained or paraprofessional group leaders. We expected that variation on the two client variables would result in variation in outcomes depending on the type of treatment received. Therapist training level was considered an important factor to examine in view of evidence that paraprofessionals can frequently rival professionals in providing effective therapeutic services (Atkins & Christensen, 2001; Christensen & Jacobson, 1994); however, little is known about whether they are differentially effective with various subgroups of clients. Before presenting the details of the current study, we briefly review the literature related to client characteristics and treatment response to provide a backdrop for the hypotheses we posed.

Client characteristics are key factors in psychotherapy outcome. Although most outcome research has focused on the efficacy of specific treatments, many are finding that client characteristics are stronger predictors of outcome than treatment factors (Holdroyd & Penzien, 1987; Neimeyer & Weiss, 1990). Contrary to traditional belief, treatments appear to capitalize on client strengths rather than compensate for their deficiencies (Elkin, 1994; Rude, 1986; Rude & Rehm, 1991; Simons, Lustman, Wetzel, & Murphy, 1985; Snow, 1991; Sotsky et al., 1991). That is, treatments may be effective not by overcoming a client’s weaknesses but rather by building on the client’s current capabilities. For example, Rude and Rehm asserted that cognitive techniques do not make up for deficits in cognitive skills per se; rather, they capitalize on the ability of those who already possess such skills.

Although client characteristics could emerge as main effects, they are more likely to interact with many variables, such as type of therapy or therapist characteristics. The ultimate goal of psychotherapy research is to improve the provision of treatment. If we understand these interactions, we can determine which treatment and type of therapist are most effective with which client. If, for example, it could be demonstrated that more “internalizing” reflective clients fare better with a Rogerian rather than a psychoeducational approach, the therapist could optimize assignment to treatment for this segment of the population. Likewise, if some types of clients were found to respond favorably only to therapists with higher levels of professional training, then empirically guided referrals to one type of intervention (e.g., professional psychotherapy vs. nonprofessional support groups) would be feasible. We conducted this study to examine selective interactions among all three classes of variables: client, therapy, and therapist. Because sufficient a priori theory supported the formulation of hypotheses about only the first two classes of variables, the latter factor was introduced only in a more exploratory fashion.

There has been little systematic exploration of Treatment Type × Client Characteristics interactions as predictors of therapy outcome. Typically, a researcher will correlate demographic variables, such as age, education, or diagnosis, with outcome. Although this occasionally yields positive results (e.g., Hoberman, Lewin-
sohn, & Tilson, 1988), most variables found to be predictive of improved functioning in one study fail to replicate (Garfield, 1986). To date, the method of exploring relevant client characteristics seems dictated more by convenience than by theory and often involves post hoc analyses (Shoham-Salomon & Hannah, 1991; Smith & Sechrest, 1991). If client characteristics do, in fact, affect outcome, our theories of psychological change mechanisms should indicate which variables would yield positive results.

Because the number of potential client attributes that may interact with various treatment components is enormous, and because the exploratory approach has thus far been relatively unproductive, there is a demand for theory-driven study of these interactions (Beutler, 1991; Garfield, 1986; Shoham-Salomon & Hannah, 1991; Smith & Sechrest, 1991; Snow, 1991). Although there are a few notable exceptions (e.g., Project MATCH Research Group, 1997), interactions have typically only been found post hoc.

Beutler and Clarkin (1990, p. 5) outlined a model of “systematic technical eclecticism”—an integration of common factors and technical eclecticism—which allows for differential prediction across treatments. Although their model is comprehensive and includes numerous variables, the current article focuses on what Beutler and Clarkin referred to as response-specific client personality factors: interpersonal reactance and coping style.

Reactance is drawn from the social psychological work of Brehm and Brehm (1981) and is defined as the likelihood of a person attempting to reinstate behavioral freedom or interpersonal control when experiencing a perceived threat to such control. Reactance varies on a continuum both between and within individuals. Those with high levels of reactance are resistant to persuasion attempts (including those of a psychotherapist), whereas those low on reactance show more compliance to suggestion (Beutler & Clarkin, 1990; Dowd et al., 1988; Dowd & Seibel, 1990; Seibel & Dowd, 1999; Shoham-Solomon, Avner, & Neeman, 1989).

Coping style is defined as the way in which individuals attempt to manage anxiety. Beutler and Clarkin (1990) consider all individuals to vary along a continuum from internalizing to externalizing coping styles. Internalization is defined as redirecting threat or anxiety toward one’s self. Externalization is “the process of limiting anxiety by transferring responsibility for one’s own behavior to external sources of influence, and/or discharging this anxiety directly through overt behavior” (Beutler & Clarkin, p. 252). Therefore, a person considered high in externalization would also be more problem and symptom focused and more extroverted, extropunitive, and undercontrolled, whereas a high internalizing person would be oriented toward emotions and insight and more introverted, intropunitive, and overcontrolled. Because these personality styles dictate different ways of interacting with the world (including the therapeutic endeavor), dealing with them in a differential manner should serve to maximize treatment effects.

Research using this approach has been profitable in determining the effects of Patient × Treatment interactions. For example, Beutler, Engle, et al. (1991) successfully predicted that (a) depressed clients who scored high on a measure of externalization would do better in a treatment oriented toward behavioral change (vs. insight) and (b) those who scored high on a reactance measure would do better in a nondirective treatment. Beutler, Machado, Engle, and Mohr (1993) also found this effect at 1-year follow-up. In addition, Beutler, Mohr, Grawe, Engle, and MacDonald (1991) replicated these findings cross-culturally using archival data.
The current study examined the interaction of coping style and reactance with type of therapy and therapist training in the course of the Memphis Depression Project (Bright, Baker, & Neimeyer, 1999). The Memphis Depression Project explored the interaction of therapist training (professionally trained vs. paraprofessionals) and type of treatment offered for depression (group cognitive–behavioral therapy [CBT] vs. mutual support group [MSG]). There was a significant and clinically substantial improvement in depression scores across the course of treatment. There were no main effects for improvement based on therapy type or therapist training. However, there was some indication of an interaction of therapist training and type of therapy delivered, such that professionals outperformed paraprofessionals in the CBT condition, whereas paraprofessionals were apparently equally effective in facilitating mutual support. The current study extends the information in that report by examining a priori the interaction of therapist and treatment variables with client characteristics, a level of analysis not presented in the earlier study. Several research studies have addressed the issue of therapist training and its effects on treatment outcome. The general conclusion, especially of quantitative reviews, is that treatment providers who are not professionally trained obtain outcomes similar to those of professionally trained therapists (Atkins & Christensen, 2001; Christensen & Jacobson, 1994; Lambert & Bergin, 1994; Nielsen, 1995). However, different clients might react differently to therapists having diverse training. For example, some might prefer the egalitarian relating of nonprofessional helpers, whereas others might prefer the authority of professionals. Few studies have examined client–therapist match regarding professional or paraprofessional training, and no tests have been performed to date of the interaction of therapist training, client characteristics, and treatment type.

**Hypotheses**

**Coping Style**

Based on Beutler and Clarkin's (1990) model, we predicted that those persons who score high on externalization would achieve better outcomes in directive, symptom-focused CBT, whereas those low on this dimension would experience greater relief through a nondirective MSG treatment focused on internal factors.

**Interpersonal Reactance**

We predicted that those who demonstrate a high level of reactance would experience a greater reduction of symptoms when treated in a less directive treatment (MSG), whereas those low on this dimension would experience greater relief in a directive treatment regimen (CBT).

**Therapist Training**

We conservatively did not put forward formal predictions regarding therapist training because the literature provides no indication of how therapist training and client characteristics might interact with each other or with type of treatment. However, we were interested in analyzing for such effects because of their plausibility and because the discovery of significant interactions could provide guidance for future researchers concerned with therapist effects in general.
Method

Participants

Ninety-eight individuals participated in this study. Depressed individuals were recruited from the Memphis community through media advertisements. Details on recruitment and screening can be found in Bright et al. (1999).

Participants were included if they (a) were older than 18 years, (b) had at least an eighth-grade education, (c) had the ability to complete the pretreatment assessment questionnaires, (d) received a diagnosis of major depression, dysthymia, or depression not otherwise specified using the Structured Clinical Interview for DSM-III-R (Spitzer & Williams, 1983; Spitzer, Williams, Gibbon, & First, 1990), and (e) obtained a Hamilton Rating Scale for Depression (HRSD; Hamilton, 1967) score of 10 or greater. Those who (a) exhibited organic or substance abuse disorders, (b) posed a suicidal threat (as assessed by an acknowledgment of active and uncontrolable suicidal impulses or plans on the Scale for Suicide Ideation; Beck, Kovacs, & Weissman, 1979), or (c) were already in treatment (including psychotropic medication) were excluded from this study.

Sample Characteristics

Of the 98 participants in the study (i.e., assigned to a group), 70 were women and 28 were men (age range = 21–72 years [M = 45.8 years]). All participants exhibited moderate to severe depressive symptoms (mean pretreatment Beck Depression Inventory [BDI] score = 21.92). At the beginning of treatment, 48 participants reported problems with severe depression lasting for the past 5 years or more. Forty-six participants reported previous treatment for depression; an additional 28 indicated previous psychotherapy for other problems. The remaining 24 participants reported no previous involvement in psychotherapy.

Random Assignment

Once approximately 16 to 20 individuals were evaluated and ready to begin treatment, they were blocked on gender and BDI score and randomly assigned to either a CBT or an MSG treatment condition for depression (both conditions are described later). Fourteen groups (equally divided between conditions) were formed over a 16-month period, each of which averaged 7 members.

Therapists

Each treatment group was lead by a male-female cotherapist team (total number of therapists = 14). The therapist teams were considered either professional or paraprofessional based on their level of training. Those who had at least a master’s degree in clinical or counseling psychology were considered professionally trained, whereas those who had no formal training in psychology or the provision of psychotherapy were considered paraprofessionals. The professionally trained clinicians had an average of 4 years of clinical training, 3 of which included supervised practice in psychotherapy. All had experience in providing individual therapy, and half had experience providing group therapy. None of the paraprofessionals had advanced degrees in psychology or experience providing individual treatment. One half of the
paraprofessionals had led some form of group therapy (e.g., self-help groups) in the community.

Each therapist served as his or her own control by administering both a CBT and an MSG treatment in conjunction with the same cotherapist. The two types of groups were conducted concurrently across a 10-week period.

**Treatment Manuals**

Therapists were oriented to the project and trained during a 2-day workshop in both forms of therapy using corresponding treatment manuals. The CBT condition used *The Feeling Good Seminar Series Leader's Manual* created by Burns (1989), and the MSG training used Mallory’s (1984) *Leading Self-Help Groups: A Guide for Training Facilitators*. Therapist compliance to each treatment was monitored using the Therapy Compliance Checklist, a scale developed for this study based on critical features of cognitive therapy derived from the Cognitive Therapy Scale (Young, Beck, & Budenz, 1983) and a parallel measure developed for the MSG treatment. In addition to assessing compliance and nonoverlap of each treatment, this scale was used as part of a “redline” procedure similar to that outlined by Shaw (1984) to minimize procedural overlap between conditions. This involved a session-by-session observational rating of treatment compliance using the Therapy Compliance Checklist. If deviation occurred, corrective action was taken in supervision to ensure that future sessions maintained their integrity. There was a high level of compliance for all groups, with no differences between professionals and paraprofessionals (see Bright et al., 1999, for details). In addition, therapists were provided with weekly supervision to ensure that no threat to client welfare existed, and they were assessed for suicide management skills using the Suicide Intervention Response Inventory (Neimeyer & Bonnelle, 1997) in view of the serious levels of depression reported by many participants.

**Measures**

Participants were assessed (a) at pretreatment regarding demographic and personality characteristics, level of global distress, and level of depression, (b) during treatment regarding depression, and (c) at posttreatment regarding both depression and global levels of distress.

The Structured Clinical Interview for *DSM–III–R* (Spitzer & Williams, 1983; Spitzer et al., 1990) was used as a reliable screening instrument to determine a potential participant’s *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition; American Psychiatric Association, 1994) diagnosis (Riskind, Beck, Berchick, Brown, & Steer, 1987). Reliability was calculated on 10% of the Structured Clinical Interview for *DSM–III–R* ratings using one clinician observer as a referent for three other interviewers. Cohen’s kappas were 1.00, .71, and 1.00, yielding an average proportion of agreement of .90. The revised version (Rehm & O’Hara, 1985) of the HRSD (Hamilton, 1967) was administered at pretreatment as a screening device and at posttreatment as an outcome measure. The HRSD is a clinician-administered rating scale that measures both the severity and behavioral aspects of depression (Lambert, Hatch, Kingston, & Edwards, 1986). The revised version was used based on its increased reliability and ease of administration (Rehm & O’Hara). Reliability for this study was calculated using one rater as a reference point for three other raters on 10% of the sample. Kendall’s tau statistics for the three comparisons were .89, .67, and .79.
The revised BDI (Beck, Rush, Shaw, & Emery, 1979) was administered immediately before beginning treatment, on a weekly basis to monitor fluctuations in mood, and at posttreatment. This scale is a 21-item self-report measure using a Likert-type rating (ranging from 0–3) for each item. The BDI has been shown to have good internal consistency ratings as well as acceptable content, concurrent, discriminant, and construct validity (see Beck, Steer, & Garbin, 1988, for a complete review).

In addition to the measures just listed, the Hopkins Symptom Checklist-58 (HSCL-58; Derogatis, Lipman, Rickles, Uhlenhuth, & Covi, 1974) was used as a measure of overall well-being at both pre- and posttreatment.

Coping style was measured by assessing the level of externalization of each participant. This was determined by summing T scores from the Pa and Pd subscales of the Minnesota Multiphasic Personality Inventory (MMPI). This measure was derived from a scale originated by Welsh (1952) and refined and validated by Beutler, Engle, et al. (1991).

Interpersonal reactance was measured using two scales. The Therapeutic Reactance Scale (TRS; Dowd, Milne, & Wise, 1991) was developed as a clinical application of Brehm and Brehm’s (1981) work, making a paper-and-pencil pretreatment assessment possible. The TRS has been shown to have acceptable test–retest reliability (Lukin, Dowd, Plake, & Kraft, 1985: .76 at 1 week; Dowd et al., 1991: .60 at 3 weeks) and internal consistency (Dowd et al., 1988: .84; Dowd & Wallbrown, 1993: .77). Several studies have concluded that it is a valid measure of reactance (Dowd, Wallbrown, Sanders, & Yesenosky, 1994; Lukin et al., 1985).

An additional measure of reactance, originally utilized by Beutler, Engle, et al. (1991), was used as well. This measure is the sum of raw scores on the Taylor Manifest Anxiety and the Edwards Social Desirability scales from the MMPI. Although this measure reportedly assesses interpersonal reactance, Beutler, Engle, et al. (1991) labeled it resistance potential (RP). Beutler et al. used this scale to successfully predict differential response to treatment, although they acknowledged that using the measure was “less than optimal” (Beutler, Engle, et al., 1991, p. 335) because it had not been validated beyond their original sample. Although there appears to be no published information on the reliability or validity of the RP measure, we believed it would be useful to include it in our study because we were conceptually replicating the work of Beutler et al.

Results

Preliminary Analyses

Table 1 presents the means and standard deviations of each of the predictor and outcome variables. In addition to information on the entire sample, Table 1 provides statistics categorized by treatment condition. All comparisons of pretreatment means were nonsignificant, indicating that there were no initial differences between treatment conditions on any of the pretreatment or predictor variables.

Table 2 provides a correlation matrix of the pretreatment, predictor, and outcome variables. Note that the two measures of reactance (TRS and RP) were uncorrelated, although they purportedly measure a similar phenomenon.

Chi-square analyses examined drop-out rates for both treatment and therapist type. No differences were detected between those who dropped out of treatment (i.e., attended fewer than 7 sessions) and those who completed the treatment (treat-
ment condition $\chi^2(1, N = 98) = 1.02, p = .31$; therapist training $\chi^2(1, N = 98) = 0.65, p = .42$).

Because a “mismatch” of client and therapy type may lead to dissatisfaction in therapy and subsequent discontinuation, we conducted tests to determine whether drop-out status could be predicted using client characteristics, group membership, and their interaction. None of the logistic regression analyses proved significant.

### TABLE 1. Means and Standard Deviations for Outcome and Predictor Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>CBT Pre</th>
<th>CBT Post</th>
<th>MSG Pre</th>
<th>MSG Post</th>
<th>Total sample Pre</th>
<th>Total sample Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI</td>
<td>22.69</td>
<td>11.74</td>
<td>21.20</td>
<td>11.17</td>
<td>21.93</td>
<td>11.43</td>
</tr>
<tr>
<td>HRSD</td>
<td>17.44</td>
<td>7.17</td>
<td>18.00</td>
<td>7.85</td>
<td>17.72</td>
<td>7.53</td>
</tr>
<tr>
<td>HSCL</td>
<td>123.77</td>
<td>99.60</td>
<td>119.26</td>
<td>102.20</td>
<td>121.47</td>
<td>100.99</td>
</tr>
<tr>
<td>Therapeutic reactance</td>
<td>65.56</td>
<td>64.98</td>
<td>65.27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance potential</td>
<td>50.31</td>
<td>49.37</td>
<td>49.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Externalization</td>
<td>143.66</td>
<td>142.59</td>
<td>143.11</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: CBT = cognitive–behavioral treatment; MSG = mutual support group; BDI = Beck Depression Inventory; HRSD = Hamilton Rating Scale for Depression; HSCL = Hopkins Symptom Checklist-58; Pre = pretreatment score; Post = posttreatment score.

### TABLE 2. Correlation Matrix of Outcome and Predictor Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>BDI</th>
<th>HRSD</th>
<th>HSCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI post</td>
<td>.45**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRSD pre</td>
<td>.49**</td>
<td>.30**</td>
<td></td>
</tr>
<tr>
<td>HRSD post</td>
<td>.42**</td>
<td>.71**</td>
<td>.39**</td>
</tr>
<tr>
<td>HSCL pre</td>
<td>.77**</td>
<td>.40**</td>
<td>.53**</td>
</tr>
<tr>
<td>HSCL post</td>
<td>.56**</td>
<td>.68**</td>
<td>.44**</td>
</tr>
<tr>
<td>TRS</td>
<td>.09</td>
<td>-12</td>
<td>-02</td>
</tr>
<tr>
<td>RP</td>
<td>.13</td>
<td>.01</td>
<td>.19</td>
</tr>
<tr>
<td>Externalization</td>
<td>.46**</td>
<td>.19</td>
<td>.23*</td>
</tr>
</tbody>
</table>

Note: BDI = Beck Depression Inventory; HRSD = Hamilton Rating Scale for Depression; HSCL = Hopkins Symptom Checklist-58; TRS = Therapeutic Reactance Scale; RP = resistance potential; Pre = pretreatment score; Post = posttreatment score.

* $p < .05$. ** $p < .01$. 


Primary Analyses

To explore possible interactions of client characteristics and treatments, hierarchical linear regression analyses were performed using treatment condition (CBT–MSG) and the continuous client characteristics (reactance–externalization) as predictors of posttreatment depression and adjustment while controlling for pretreatment scores. To examine the reactance variable, both the TRS and RP measures were used. Analyses using the TRS yielded no significant main effects or interactions of client and treatment characteristics on any of the dependent measures.\(^1\) The RP measure also yielded no significant results.\(^2\) Examination of externalizing coping style similarly provided no significant main or interaction effects.\(^3\)

However, a test for possible three-way interactions adding the therapist training variable to the equation yielded interesting results. As indicated in Table 3, a significant two-way interaction of treatment type and therapist condition on the BDI was surpassed by a three-way interaction among treatment type, therapist type, and RP. The same trend emerged for both of the other outcome measures, but it failed to reach conventional levels of significance.\(^4\) The hypothesis in this study was that those with high levels of reactance would improve more in MSG treatment and show less improvement in CBT, whereas those with low scores on this dimension would show greater improvement in CBT and less improvement in MSG. This hypothesis was confirmed only for paraprofessional therapists. Professionally trained therapists had, in fact, the opposite pattern of outcome scores, such that high-reactance clients responded more favorably to the CBT than the MSG condition. Tests using Dowd

\(^{1}\)BDI: pretreatment BDI \(R^2 = .19, F(1, 66) = 14.99, p < .01\); treatment \(R^2 = .00, F(1, 65) = .01, p = .94\);

TRS \(R^2 = .03, F(1, 64) = 2.55, p < .12\); TRS \(\times\) Treatment \(R^2 = .01, F(1, 63) = .51, p = .48\).

HRSD: pretreatment HRSD \(R^2 = .16, F(1, 66) = 12.30, p < .01\); treatment \(R^2 = .00, F(1, 65) = .01, p = .94\); TRS \(R^2 = .02, F(1, 64) = 1.88, p = .18\); TRS \(\times\) Treatment \(R^2 = .00, F(1, 65) = .12, p = .74\).

HSCL: pretreatment HSCL \(R^2 = .45, F(1, 65) = 52.60, p < .01\); treatment \(R^2 = .00, F(1, 64) = .28, p = .60\); TRS \(R^2 = .01, F(1, 63) = 1.64, p = .21\); TRS \(\times\) Treatment \(R^2 = .01, F(1, 62) = .77, p = .39\).

\(^{2}\)BDI: pretreatment BDI \(R^2 = .21, F(1, 63) = 16.32, p < .01\); treatment \(R^2 = .00, F(1, 62) = .04, p = .85\);

RP \(R^2 = .00, F(1, 61) = .01, p = .94\); PR \(\times\) Treatment \(R^2 = .00, F(1, 60) = .14, p = .71\).

HRSD: pretreatment HRSD \(R^2 = .18, F(1, 63) = 13.59, p < .01\); treatment \(R^2 = .00, F(1, 62) = .06, p = .82\); RP \(R^2 = .04, F(1, 61) = 2.90, p = .09\); RP \(\times\) Treatment \(R^2 = .00, F(1, 60) = .02, p = .89\).

HSCL: pretreatment HSCL \(R^2 = .44, F(1, 62) = 48.03, p < .01\); treatment \(R^2 = .01, F(1, 61) = .06, p = .44\); RP \(R^2 = .00, F(1, 60) = .12, p = .73\); RP \(\times\) Treatment \(R^2 = .01, F(1, 59) = .09, p = .35\).

\(^{3}\)BDI: pretreatment BDI \(R^2 = .20, F(1, 64) = 16.18, p < .01\); treatment \(R^2 = .00, F(1, 63) = .01, p = .91\);

externalization \(R^2 = .00, F(1, 62) = .06, p = .81\); Externalization \(\times\) Treatment \(R^2 = .00, F(1, 61) = .01, p = .92\).

HRSD: pretreatment HRSD \(R^2 = .18, F(1, 63) = 14.03, p < .01\); treatment \(R^2 = .00, F(1, 62) = .04, p = .84\); externalization \(R^2 = .04, F(1, 62) = 5.28, p = .05\); Externalization \(\times\) Treatment \(R^2 = .01, F(1, 62)

\(= .08, p = .35\).

HSCL: pretreatment HSCL \(R^2 = .43, F(1, 63) = 48.35, p < .01\); treatment \(R^2 = .00, F(1, 62)

\(= .44, p = .51\); Externalization \(R^2 = .02, F(1, 61) = 1.67, p = .20\); Externalization \(\times\) Treatment \(R^2 = .00, F(1, 60) = .06, p = .80\).

\(^{4}\)HRSD: pretreatment HRSD \(R^2 = .18, F(1, 63) = 13.59, p < .01\); treatment \(R^2 = .00, F(1, 62) = .06, p = .82\); therapist \(R^2 = .06, F(1, 61) = 4.53, p = .04\); RP \(R^2 = .04, F(1, 60) = 2.98, p = .09\); Therapist \(\times\) Treatment \(R^2 = .00, F(1, 59) = .09, p = .79\); RP \(\times\) Treatment \(R^2 = .00, F(1, 58) = .00, p = .98\); RP \(\times\) Therapist \(R^2 = .01, F(1, 57) = .46, p = .50\); RP \(\times\) Therapist \(\times\) Treatment \(R^2 = .04, F(1, 56) = .52, p = .08\); HCCL: pretreatment HCCL \(R^2 = .44, F(1, 62) = 48.03, p < .01\); treatment \(R^2 = .01, F(1, 61) = .60, p = .44\); therapist \(R^2 = .00, F(1, 60) = .33, p = .57\); RP \(R^2 = .00, F(1, 59) = .13, p = .72\); Therapist \(\times\) Treatment \(R^2 = .00, F(1, 58) = .03, p = .86\); RP \(\times\) Treatment \(R^2 = .01, F(1, 57) = .97, p = .35\); RP \(\times\) Therapist \(R^2 = .01, F(1, 56) = .94, p = .34\); RP \(\times\) Therapist \(\times\) Treatment \(R^2 = .03, F(1, 55) = .39, p = .07\).
et al.’s (1991) TRS yielded no significant results when therapist training was included in the analyses.5

When therapist training was included in the analyses using the externalization measure, a significant main effect for therapist type on the HRSD was evident, $R^2 = .05$, $F(1, 62) = 4.24$, $p = .04$. However, this was overshadowed by an interaction of therapist type and coping style, $R^2 = .06$, $F(1, 58) = 5.47$, $p = .02$, with no significant effects for interactions involving treatment condition: Treatment × Therapist $R^2 = .03$, $F(1, 61) = 2.80$, $p = .10$; Treatment × Externalization $R^2 = .01$, $F(1, 59) = 0.41$, $p = .52$; Treatment × Therapist × Externalization $R^2 = .03$, $F(1, 57) = 2.91$, $p = .09$. Table 4 presents statistics for the reduced model (i.e., excluding nonsignificant interactions and lower order terms). Although pretreatment depression scores were the single most powerful predictor of posttreatment depression, accounting for 18% of the total variance, externalization, therapist training, and their interaction accounted for an additional 14%. Notably, the additional variance accounted for by either therapist training or its interaction with client characteristics essentially doubled that associated with client externalization alone.

Figure 1 contains a plot of participants’ HRSD change and externalization scores broken down by therapist training type. Examination of this plot reveals that clients scoring high on the measure of externalization showed less improvement when treated by professionally trained therapists but did better when treated by paraprofessionals.

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### Table 3. Results of Regressing Beck Depression Inventory Scores on Resistance Potential, Treatment Type, Therapist Type, and Their Interactions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized regression coefficient</th>
<th>$t$</th>
<th>$p$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI pre</td>
<td>−.47</td>
<td>4.03</td>
<td>&lt;.001</td>
<td>.21</td>
<td>.21</td>
<td>16.32</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Treatment (A)</td>
<td>−3.675</td>
<td>−1.47</td>
<td>.148</td>
<td>.21</td>
<td>.00</td>
<td>.04</td>
<td>.845</td>
</tr>
<tr>
<td>Training (B)</td>
<td>−3.74</td>
<td>−1.26</td>
<td>.214</td>
<td>.21</td>
<td>.00</td>
<td>.10</td>
<td>.762</td>
</tr>
<tr>
<td>RP (C)</td>
<td>−.31</td>
<td>−1.16</td>
<td>.252</td>
<td>.21</td>
<td>.00</td>
<td>.01</td>
<td>.932</td>
</tr>
<tr>
<td>A × B</td>
<td>6.81</td>
<td>2.01</td>
<td>.049</td>
<td>.24</td>
<td>.04</td>
<td>2.74</td>
<td>.103</td>
</tr>
<tr>
<td>A × C</td>
<td>3.82</td>
<td>1.54</td>
<td>.128</td>
<td>.24</td>
<td>.00</td>
<td>.14</td>
<td>.714</td>
</tr>
<tr>
<td>B × C</td>
<td>3.94</td>
<td>1.34</td>
<td>.186</td>
<td>.25</td>
<td>.00</td>
<td>.16</td>
<td>.692</td>
</tr>
<tr>
<td>A × B × C</td>
<td>−7.10</td>
<td>−2.12</td>
<td>.039</td>
<td>.30</td>
<td>.06</td>
<td>4.49</td>
<td>.039</td>
</tr>
</tbody>
</table>

Note: Pre = pretreatment; BDI = Beck Depression Inventory; RP = reaction potential.

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5BDI: pretreatment BDI $R^2 = .19$, $F(1, 66) = 14.99$, $p < .01$; treatment $R^2 = .00$, $F(1, 65) = 0.01$, $p = .94$; therapist $R^2 = .00$, $F(1, 64) = 0.24$, $p = .62$; TRS $R^2 = .03$, $F(1, 63) = 2.79$, $p = .10$; Therapist × Treatment $R^2 = .02$, $F(1, 62) = 1.45$, $p = .23$; TRS × Treatment $R^2 = .01$, $F(1, 61) = 0.62$, $p = .43$; TRS × Therapist $R^2 = .01$, $F(1, 60) = 0.81$, $p = .37$; TRS × Therapist × Treatment $R^2 = .00$, $F(1, 59) = 0.01$, $p = .94$. HRSD: pretreatment HRSD $R^2 = .16$, $F(1, 66) = 12.28$, $p < .01$; treatment $R^2 = .00$, $F(1, 65) = 0.01$, $p = .94$; therapist $R^2 = .04$, $F(1, 64) = 3.46$, $p = .07$; Treatment $R^2 = .02$, $F(1, 63) = 1.34$, $p = .25$; Therapist × Treatment $R^2 = .00$, $F(1, 62) = 0.00$, $p = .96$; TRS × Treatment $R^2 = .00$, $F(1, 61) = 0.00$, $p = .95$; TRS × Therapist $R^2 = .01$, $F(1, 60) = 0.86$, $p = .36$; TRS × Therapist × Treatment $R^2 = .01$, $F(1, 59) = 0.77$, $p = .38$. HSCL: pretreatment HSCL $R^2 = .45$, $F(1, 65) = 52.60$, $p < .01$; treatment $R^2 = .00$, $F(1, 64) = 0.28$, $p = .44$; therapist $R^2 = .01$, $F(1, 63) = 0.67$, $p = .42$; Treatment $R^2 = .02$, $F(1, 62) = 1.96$, $p = .17$; Therapist × Treatment $R^2 = .00$, $F(1, 61) = 0.00$, $p = .99$; TRS × Treatment $R^2 = .00$, $F(1, 60) = 0.43$, $p = .51$; TRS × Therapist $R^2 = .00$, $F(1, 59) = 0.01$, $p = .94$; TRS × Therapist × Treatment $R^2 = .00$, $F(1, 58) = 0.01$, $p = .93$. 

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3BDI: pretreatment BDI $R^2 = .19$, $F(1, 66) = 14.99$, $p < .01$; treatment $R^2 = .00$, $F(1, 65) = 0.01$, $p = .94$; therapist $R^2 = .00$, $F(1, 64) = 0.24$, $p = .62$; TRS $R^2 = .03$, $F(1, 63) = 2.79$, $p = .10$; Therapist × Treatment $R^2 = .02$, $F(1, 62) = 1.45$, $p = .23$; TRS × Treatment $R^2 = .01$, $F(1, 61) = 0.62$, $p = .43$; TRS × Therapist $R^2 = .01$, $F(1, 60) = 0.81$, $p = .37$; TRS × Therapist × Treatment $R^2 = .00$, $F(1, 59) = 0.01$, $p = .94$. HRSD: pretreatment HRSD $R^2 = .16$, $F(1, 66) = 12.28$, $p < .01$; treatment $R^2 = .00$, $F(1, 65) = 0.01$, $p = .94$; therapist $R^2 = .04$, $F(1, 64) = 3.46$, $p = .07$; Treatment $R^2 = .02$, $F(1, 63) = 1.34$, $p = .25$; Therapist × Treatment $R^2 = .00$, $F(1, 62) = 0.00$, $p = .96$; TRS × Treatment $R^2 = .00$, $F(1, 61) = 0.00$, $p = .95$; TRS × Therapist $R^2 = .01$, $F(1, 60) = 0.86$, $p = .36$; TRS × Therapist × Treatment $R^2 = .01$, $F(1, 59) = 0.77$, $p = .38$. HSCL: pretreatment HSCL $R^2 = .45$, $F(1, 65) = 52.60$, $p < .01$; treatment $R^2 = .00$, $F(1, 64) = 0.28$, $p = .44$; therapist $R^2 = .01$, $F(1, 63) = 0.67$, $p = .42$; Treatment $R^2 = .02$, $F(1, 62) = 1.96$, $p = .17$; Therapist × Treatment $R^2 = .00$, $F(1, 61) = 0.00$, $p = .99$; TRS × Treatment $R^2 = .00$, $F(1, 60) = 0.43$, $p = .51$; TRS × Therapist $R^2 = .00$, $F(1, 59) = 0.01$, $p = .94$; TRS × Therapist × Treatment $R^2 = .00$, $F(1, 58) = 0.01$, $p = .93$. 

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In contrast, more internalizing clients fared better with professionals and demonstrated less improvement when treated by nonprofessionally trained therapists.

**Secondary Analyses**

To gain insight into the lack of convergence of the two measures of reactance, internal consistency scores were calculated for both measures of this construct. Cronbach’s alphas were .89 and –.20 for TRS and RP, respectively. Whereas the internal consistency of TRS was impressive, RP demonstrated an extreme lack of internal consistency. Examination of individual items on this scale revealed that some items were inversely coded because of the nature of combining the Taylor Manifest Anxiety and Edwards Social Desirability scales. That is, several of the same MMPI items were scored as true on one scale and false on the other or vice versa.

As a result of problems discovered with the purported measure of reactance derived from the MMPI, the internal consistency of the externalization measure (also

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**TABLE 4. Results of Regressing Hamilton Rating Scale for Depression (HRSD) Scores on Externalization, Therapist Type, and Their Interaction**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized regression coefficient</th>
<th>t</th>
<th>p</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRSD pre</td>
<td>+.41</td>
<td>3.80</td>
<td>.001</td>
<td>.18</td>
<td>.18</td>
<td>14.03</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Training (A)</td>
<td>+1.48</td>
<td>2.00</td>
<td>.051</td>
<td>.23</td>
<td>.05</td>
<td>4.30</td>
<td>.043</td>
</tr>
<tr>
<td>Externalization (B)</td>
<td>+.41</td>
<td>2.82</td>
<td>.006</td>
<td>.26</td>
<td>.03</td>
<td>2.78</td>
<td>.101</td>
</tr>
<tr>
<td>A × B</td>
<td>–1.71</td>
<td>–2.30</td>
<td>.025</td>
<td>.32</td>
<td>.06</td>
<td>5.31</td>
<td>.025</td>
</tr>
</tbody>
</table>

---

**FIGURE 1.** Regression lines for professional and paraprofessional therapists predicting change in Hamilton Rating Scale for Depression (HRSD) scores based on client coping style.
derived from the MMPI) was calculated. The Cronbach’s alpha coefficient for this measure was .72, indicating a moderate level of internal consistency.

Discussion

This study examined the client characteristics of interpersonal reactance and level of externalization as predictors of differential response to CBT or MSG treatment for depression, each of which was conducted by professional and nonprofessional therapists. The major hypotheses, derived from Beutler and Clarkin’s (1990) systematic treatment selection model, were supported only with qualifications.

The reactance variable was expected to interact with treatment type so that those with higher levels would have better outcomes in the MSG condition and those with lower levels would fare better in the CBT treatment. Although this predicted pattern emerged for nonprofessionally trained clinicians and not for professionally trained therapists, we question the interpretability of this finding because of the serious problem of internal consistency of the RP measure. Because this measure is statistically unreliable, it is dubious whether it can be considered an accurate measure of reactance, thereby potentially undermining the apparent significance of these results. The issue of the validity of the RP scale goes beyond this study. Very little validation work has been done on it as a measure of reactance (Beutler, Engle, et al., 1991), and because the negative Cronbach’s alpha coefficient is due to the method of calculation rather than issues unique to our sample, previous findings based on this scale (e.g., Beutler, Engle, et al. 1991; Beutler et al., 1993; Beutler, Mohr, et al. 1991) stand in need replication using a psychometrically sound measure of reactance.

Results based on the more reliable TRS were not significant. This raises questions as to why the expected interaction was not observed. The assumptions underlying the hypothesized interaction were that MSG would naturally facilitate improvement for those high in reactance, whereas CBT would, because of its directive nature, interfere with improvement for these same clients. However, it may be that because CBT offers a number of strategies for responding in a collaborative way to the resistant client, the CBT condition also counteracted the potential effects of reactance.

In comparison, the interaction between client coping style and therapist training was both significant and interpretable. Clients with high scores on the externalization measure did better when treated by a paraprofessional team, whereas those with low scores on this measure had better outcomes when treated by professionally trained therapists. One possible explanation for this interaction may be that externally oriented clients, who tend to formulate problems in more situational terms, respond well to paraprofessionals’ attention to concrete factors that could reinforce depression, irrespective of treatment condition. In contrast, internalizing clients, who view problems in more “psychological” terms, seem primed to benefit from the greater expertise of professionals in cognitive and emotional change processes. Because we defined professional as having a clinical master’s degree and paraprofessional as not having such a degree, the exact nature of the differences between professional and paraprofessional therapists cannot be ascertained using the current data. However, these results point to the critical importance of therapist characteristics, a factor heretofore ignored in Client × Treatment interaction studies.

The implications of these findings range from the conceptual to the practical. Conceptually, one agenda for future research is to identify the potentially subtle differences in how professional and paraprofessional therapists conduct purport-
edly the “same” treatment—even under highly controlled and manualized conditions—in a way that promotes differential outcome for different clients. Although not based on our empirical analyses, our observation of the groups leads us to suspect that professionals were more adroit in analyzing and orchestrating specific interventions for self-defeating client patterns irrespective of treatment condition, a skill that might well have been appreciated by more “internalizing” clients. Ex-
ternalizing group members, on the other hand, might well have experienced these same therapeutic responses as abstract and irrelevant. In contrast, the common-sensical “real-world” solutions promoted by paraprofessional therapists might have resonated with the problem formulations of externalizing clients, whereas internalizers might have found these straightforward interventions simplistic or even con-
descending. This conjecture deserves further empirical attention, as does the practical question of how clients can be matched with appropriate therapists or, conversely, how therapists can be trained to adapt more flexibly to the idiosyncratic coping styles of their clients.

**Conclusion**

Results underscore the potential relevance of client characteristics such as internalizing versus externalizing coping style to predicting response to different treat-
ment formats, but such interactions may be more complicated than initially suspected. In particular, therapist training seems at least as important as therapy approach (CBT vs. MSG) in interacting with client type to influence reduction in depressive symp-
toms. Although examination of higher order interactions poses both pragmatic and conceptual challenges for future investigators, the results of this research suggest that attention must be given to such interaction effects if research is to contribute to a model of systematic treatment selection.

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THERAPIST AND CLIENT PREDICTORS OF TREATMENT RESPONSE


Zusammenfassung

Résumé
Même si des décisions au sujet de l’ajustement entre traitement et client particulier font partie de la routine des psychothérapeutes, ces décisions sont typiquement guidées par quelque chose d’autre que le savoir empirique. Deux variables s’étant montrées prometteuses dans l’ajustement des traitements aux clients sont la réactivité psychologique et les styles de coping extériorisants. Cette étude a exploré la relation entre ces 2 caractéristiques de clients et la réponse à 2 types de thérapies de groupe pour la dépression – une thérapie de groupe cognitivo-comportementale et une thérapie de groupe de soutien mutuel – menées par 2 catégories de leaders : avec et sans formation professionnelle. Les hypothèses au sujet des interactions entre caractéristiques des clients et type de traitement n’ont pas été confirmées.
Une interaction a émergé cependant entre niveau de formation des thérapeutes et style de coping des clients, dans le sens qu’indépendamment du traitement fourni, les patients au style de coping plus extériorisant profitaient mieux d’un traitement par un para-professionnel que par un professionnel, alors que ceux avec un style de coping plus intérieurisant gagnaient davantage d’un traitement par des thérapeutes avec formation professionnelle. De ces résultats ressort qu’il faut tenir compte des caractéristiques des thérapeutes si la recherche veut contribuer à un modèle de sélection systématique de traitement.

Resumen
Si bien los psicoterapeutas toman decisiones de rutina acerca de cómo elegir tratamiento para un cliente particular, estas decisiones están guiadas típicamente por algo más que el conocimiento empírico. Dos variables se han mostrado promisorias en la elección de tratamientos para clientes psicológicamente refractarios y para encarar estilos de externalización. Este estudio exploró la relación de estas dos características en respuesta a dos tipos de terapias grupales para la depresión: cognitivo-comportamental y de apoyo mutuo, conducidas por dos tipos de coordinadores, uno entrenado profesionalmente y otro paraprofesional. No se confirmaron las hipótesis relativas a las interacciones entre las características de los clientes y el estilo de entrenamiento. Sin embargo, emergió una interacción entre el nivel de entrenamiento del terapeuta y el estilo de afrontamiento del paciente, que indica que, con cualquier tratamiento, los clientes que tenían un estilo de afrontamiento de mayor externalización obtienen más de su tratamiento con paraprofesionales que con terapeutas profesionalmente entrenados, mientras que quienes tenían un estilo de mayor internalización obtuvieron más con terapeutas profesionalmente entrenados que con paraprofesionales. Estos resultados sugieren que se debe prestar atención a las características del terapeuta si la investigación ha de contribuir a la selección sistemática del modelo de tratamiento.

Resumo
Embora os psicoterapeutas tomam regularmente decisões sobre o modo como adaptar o tratamento a um cliente em particular, estas decisões não são tipicamente guiadas pelo conhecimento empírico. Duas variáveis que se demonstraram promissoras na adequação os tratamentos aos clientes são a reatividade psicológica e os estilos de coping externalizantes. O presente estudo explora a relação entre estas 2 características do cliente e a resposta a 2 tipos de terapia para a depressão – terapia de grupo cognitivo-comportamental e terapia de grupo de suporte mútuo – conduzidas por dois tipos de líderes, profissionais e paraprofissionais. As hipóteses relativas às interacções das características do cliente e tipos de tratamento não foram confirmadas. Porém, emergiu uma interacção entre o nível de treino do terapeuta e os estilos de coping dos clientes, indicando que, independentemente do tipo de tratamento oferecido, os clientes com um estilo de coping mais externalizador tiveram melhores resultados quando tratados por paraprofissionais do que por profissionais, enquanto que aqueles com um estilo de coping internalizador tiveram melhores resultados quando tratados por profissionais do que por paraprofissionais. Estes resultados sugerem que deve ser dada atenção às características do terapeuta se quisermos que a investigação contribua para um modelo de selecção sistemática do tratamento.

Sommario
Sebbene quotidianamente gli psicoterapeuti prendano decisioni su quale tipo di trattamento offrire ad ogni paziente, queste decisioni spesso non sono dettate dalle conoscenze empiriche. Due variabili che si sono dimostrate promettenti nella scelta del trattamento più idoneo per un particolare paziente sono state la reattività psicologica e gli stili di coping mostrati. Il presente studio esplora la relazione tra queste due variabili del paziente e due tipi di terapia di gruppo per la depressione: la terapia di gruppo ad orientamento cognitivo-comportamentale e la terapia di gruppo di mutuo supporto tenute da due tipi differenti di conduttori: professionisti addestrati e operatori. Le ipotesi di un’interazione tra le caratteristiche del paziente e il tipo di trattamento non sono state dimostrate. Comunque sia e emersa un’interazione tra il livello d’addestramento del terapeuta con lo stile di coping del paziente, in particolare indipendentemente dal tipo di trattamento: pazienti con uno stile di coping più esternallizzato riuscivano meglio al trattamento quando il gruppo era condotto da un operatore che da un terapeuta esperto viceversa pazienti con uno stile di coping molto internallizzato travevano maggior beneficio da un terapeuta esperto rispetto ad un operatore. Questi risultati suggeriscono come sia necessario prestare attenzione alle caratteristiche del terapeuta se la ricerca vuole contribuire all’individuazione di un modello sistematico di trattamento.
摘要
尽管治疗师经常为选择适合的个案治疗方式而做决定，但这些决策通常是基于其他考量而不是根据实证性的知识而来。两个被视作是治疗师为个案选择治疗方式中的重要考量，为个案的心理阻抗与外显化的因应型态。本研究为探讨这两个个案变量，两种类忧症团体治疗方式（认知行为团体治疗与互助团体治疗），以及两种团体领导者专业程度（专业训练人员及半专业人员）间的互动。研究结果不支持个案特性和治疗方法间交互作用的假设。然而，治疗师的专业程度和个案的因应型态间则存有交互作用。这样的结果显示，无论提供的治疗方式为何，若个案具有较外显化的因应型态，则半专业人员的治疗效果优于专业人员；而因应型态较内隐化的个案，则较能从专业人员的治疗中获益。研究结果建议未来研究如果希望对系统化治疗方式选择有所贡献的话，必须重视治疗师的特性。

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