Client Predictors of Short-Term Psychotherapy Outcomes Among Asian and White American Outpatients

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Purpose: To examine predictors of psychotherapy outcomes, focusing on client characteristics that are especially salient for culturally diverse clients. **Method:** Sixty clients (31 women; 27 White Americans, 33 Asian Americans) participated in this treatment study. Client characteristics were measured at pretreatment, and outcomes were measured postfourth session via therapist ratings of functioning and symptomatology. Regression analyses were utilized to test for predictors of outcomes, and bootstrap analyses were utilized to test for mediators. **Results:** Higher levels of somatic symptoms predicted lower psychosocial functioning at posttreatment. Avoidant coping style predicted more negative symptoms and more psychological discomfort. Non-English language preference predicted worse outcomes; this effect was mediated by an avoidant coping style. **Conclusions:** Language preference, avoidant coping style, and somatic symptoms predicted treatment outcome in a culturally diverse sample. Findings suggest that race/ethnicity-related variables may function through mediating proximal variables to affect outcomes. J. Clin. Psychol. 68:1287–1302, 2012.

Keywords: psychotherapy; outcomes; client factors; immigrants; Asian Americans

Client variables substantially influence the effectiveness of psychotherapy (Clarkin & Levy, 2004). These variables are vast and encompass demographic characteristics (e.g., age, gender, educational level), cultural factors (e.g., religious beliefs, beliefs about mental illness), as well as individual factors (e.g., presenting problem, personality characteristics; Bernal & Saez-Santiago, 2006). Lambert (1992) examined the variance accounting for improvement across psychotherapies and found that 30% of the improvement was treatment-related and 30% was therapist-related. The remaining 40% was due to the combination of client and environmental factors. In the National Institute of Mental Health-sponsored Treatment of Depression Collaborative Research Program (Elkin, 1994), client characteristics were better predictors of outcomes than the treatments themselves (Blatt, Zuroff, & Hawley, 2009).

One's cultural background is a broad yet important client variable as it can often have pivotal influences on treatment outcomes (Zane, Hall, Sue, Young, & Nunez, 2004). Previous studies have indicated that racial/ethnic minorities tend to benefit less from psychotherapy compared to their White American counterparts (Lam & Sue, 2001; Zane, Enomoto, & Chun, 1994). Racial/ethnic minorities also tend to underutilize mental health services and have higher rates of treatment dropout (U.S. DHHS, 2001). These disparities remain a major clinical challenge, and previous research has not been that informative as to why these disparities exist for culturally diverse clientele (Zane et al., 2004). Betancourt and Lopez (1993) have articulated for some time that to understand meaningful racial/ethnic variations, researchers must identify specific and measurable cultural variables that are potentially responsible for these group differences. This shift to study variables such as cultural value orientation, cultural identity, control or coping orientation, and shame and stigma may increase our understanding of the psychological underpinnings as to why these disparities continue to exist.

Examining the effect of client variables in treatment can be broadly summarized under a proximal-distal formulation. Group-level variables (e.g., gender and race/ethnicity) may be tied

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to outcomes (Clarkin & Levy, 2004), but these often operate as distal variables that work through several proximal variables to affect outcomes (Alvidrez, Azocar, & Miranda, 1996; Sue & Zane, 1987). Proximal variables in this case may include those that are related to one's race/ethnicity, such as immigration history and socioeconomic status. Given that such variables remain rather immutable characteristics of an individual, more informative proximal variables may be those clinical characteristics of clients that therapists are able to identify and target within sessions to enhance the effectiveness of treatment.

This overall approach is an extension of Sue and Zane's proximal-distal model (1987), which posits that cultural techniques in treatment are distal to specific processes that foster credibility. That is, although both are important to outcomes, it is likely that outcomes are more affected by aspects such as client attitudes (proximal) than by client race/ethnicity (distal). Moreover, these proximal variables tend to be more mutable in psychotherapy as opposed to the distal, organismic variables such as client race and ethnicity. This proximal-distal conceptualization suggests a mediational approach in which the research determines if distal variables are related to certain proximal variables, which then are tested in terms of their influence on psychotherapy outcomes. Adopting this overall framework, distal characteristics included in the current investigation were client age, gender, race (Asian American or White American), socioeconomic status, and language preference.

These variables were selected given past research demonstrating these demographic characteristics to be related to treatment use, early termination, and outcome, albeit with some mixed consistency (Bernal & Saez-Santiago, 2006; Clarkin & Levy, 2004). For example, in a review of demographic predictors of psychotherapy outcomes, Van, Schoevers, and Dekker (2008) reported that gender and age predicted differential effectiveness depending on the type of therapy. Racial group status (Asian American or White American) was conceptualized as a distal variable for two reasons. First, previous findings indicate differential treatment outcomes between the two groups (Zane et al., 1994), but it has been unclear which proximal characteristics might be responsible for this effect. Moreover, Wong, Beutler, and Zane (2007) highlighted the distal nature of racial group membership to proximal client responses.

In an experimental analogue design, Asian American participants judged counseling as less credible than did White American participants, and this racial difference was mediated by the extent to which the participant understood the therapist. The current study builds on this research by determining if certain proximal characteristics are predictive of treatment outcomes among actual outpatient clients from diverse racial backgrounds. Language preference was included as a distal variable given the importance of language match when conducting therapy with culturally diverse clients (Bernal, Bonilla, & Bellido, 1995; Zane et al., 2005).

Under this proximal-distal formulation, it is possible for there to be an infinite number of proximal client characteristics that may be studied. Proximal characteristics selected for this study were drawn from major themes that previous researchers have identified as being salient in the treatment of culturally diverse clients (e.g., Bernal & Saez-Santiago, 2006; Hwang, Myers, Abe-Kim, & Ting, 2008). These characteristics, embedded in Hwang et al.'s (2008) cultural influences on mental health model as well as Bernal et al.'s (1995) ecological validity model, included problem conceptualization, problem solving or coping, treatment credibility, and somatic expressions of distress.

For problem conceptualization, it has been well acknowledged that one's cultural background can influence perceptions and beliefs of what is considered to be a psychological problem (Hwang et al., 2008). In order for psychotherapy to be effective, the client's problems should be conceptualized in a manner that is synchronous with the client's belief systems (Bernal et al., 1995; Frank, 1971). Beliefs about the causes of psychological problems can then influence the coping methods that are chosen (Hwang et al., 2008; Tweed & Conway, 2006), and thus it is important for coping styles to be considered in a culturally congruent manner (Sue & Zane, 1987). Credibility is understood to be important to outcomes (Kazdin & Wilcoxon, 1976), but there may be culturally held beliefs that therapy is not a viable solution to one's emotional problems (Sue & Zane, 1987) which can then influence treatment effectiveness.

A common cultural expression of distress is via somatic symptoms, which may be related to culturally sanctioned help-seeking behaviors (Hwang et al., 2008; Yen, Robins, & Lin, 2000).

Given these possible areas of cultural variations that may bear particular relevance in treatment for culturally diverse individuals, our goals were multifold: to systematically explore the relationship of these distal characteristics to treatment outcome, to examine the relationship between the proximal characteristics with the distal characteristics, and most importantly, to examine the actual influence of these proximal characteristics to treatment outcome.

In the present study, we tested client characteristics as predictors of short-term psychotherapy outcomes in a diverse sample of Asian American and White American outpatients. We compared the two groups in order to initially examine if there were racial and other demographic-related variations on outcomes as previous studies have found (e.g., Zane et al., 1994), and if so, if these variations might be explained by key differences in the proximal characteristics. Applying the framework of Sue and Zane's (1987) proximal-distal model, we first determined if distal characteristics (i.e., gender, age, race, socioeconomic status, and language preference) were related to proximal characteristics (i.e., problem perception, coping style, treatment credibility, and somatic symptoms). We then examined if these proximal characteristics were predictive of treatment outcomes in the areas of psychosocial functioning and psychiatric symptomatology (e.g., depressive, anxiety, and psychotic symptoms). Last, we tested whether client demographic characteristics had indirect effects on outcomes via these clinical characteristics as possible mediators.

Method

Participants and Treatment Setting

This study used clinical data from 60 clients from a community mental health agency that serves a multiethnic community in the San Francisco Bay Area. Participants provided the following information: age, gender, racial/ethnic background, birthplace, marital status, living arrangement (e.g., living with family members), educational level, preferred language in treatment (i.e., English or non-English), employment status, and occupation. Occupation was used to determine the client's socioeconomic status according to the Nam-Powers socioeconomic index (Miller, 1991). The Nam-Powers index ranges from a score of 0 to 100, with higher numbers reflecting higher socioeconomic standing. Criterion validity for the Nam-Powers has been supported by high correlations with measures such as the Duncan Socioeconomic Index, $r = .97$ (Miller, 1991). A single set of scores is commonly used to reflect socioeconomic status for both genders (Miller, 1991). Table 1 describes the participant demographic characteristics.

The mental health agency was comprised of multidisciplinary staff including social workers, marriage and family therapists, psychologists, and psychiatrists. Agency staff had been extensively trained on ethnocultural issues (e.g., continuing education workshops on culturally competent practices; proseminars devoted to addressing cultural issues in clinical cases) to better serve the surrounding ethnic population. Eighteen providers (17 females, one male) treated clients in the study, including six social workers, five psychologists, three psychiatrists who provide psychotherapy, two psychology interns, and two vocational therapists. The average age of the therapists was 31.8 years (standard deviation [*SD*] = 6.23), and the racial/ethnic backgrounds included five White Americans (Russian and European Americans) and 13 Asian Americans (Chinese, Vietnamese, Cambodian, Japanese, and Korean Americans). All of the Asian American therapists in the study were fluent in their native Asian languages, and there were two Russian American therapists who were fluent in Russian. Most of the therapists (85%) reported using primarily psychodynamically oriented, short-term treatment approaches in their work, and the remaining used primarily cognitive behavioral treatments. The average number of clients seen by therapists was 3.3 (*SD* = 3.63). Some therapists saw more clients than other therapists, but preliminary analyses found no therapist effects on any of the outcome variables assessed.[1]

[1] Of the 18 treatment providers and 60 clients in the study, there were eight unique client-therapist dyads (i.e., one therapist saw just one client); therefore, therapist effects could not be examined in this case. Of the 10

Table 1
Client Demographic Characteristics

	Asian Americans ($n = 33$)	White Americans ($n = 27$)	Total ($N = 60$)
M Age (*SD*)	37.24 (12.12)	45.07 (12.78)	40.8 (12.9)
Gender			
Female	15 (25%)	16 (26.7%)	31 (51.7%)
Male	18 (30%)	11 (18.3%)	29 (48.3%)
Place of birth			
U.S.	5 (8.3%)	17 (28.3%)	22 (36.7%)
Other	28 (46.7%)	10 (16.6%)	38 (63.3%)
M Years in U.S. for non-U.S. born (*SD*)	11.54 (7.27)	3.44 (4.59)	9.57 (7.53)
Ethnic background			
Chinese	14 (23.3%)		
Vietnamese	10 (16.7%)		
Chinese-Vietnamese	2 (3.3%)		
Cambodian	1 (1.7%)		
European American		17 (28.3%)	
Japanese	1 (1.7%)		
Korean	1 (1.7%)		
Russian		10 (16.7%)	
Other	4 (6.7%)		
Marital status			
Single/never married	18 (30%)	8 (13.3%)	26 (43.3%)
Married	9 (15%)	2 (3.3%)	11 (18.3%)
Separated/divorced	4 (6.7%)	13 (21.7%)	17 (28.3%)
Widowed	2 (3.3%)	4 (6.7%)	6 (10%)
Educational level			
Some high school or less	14 (23.3%)	0	14 (23.3%)
High school degree or equivalent	6 (10%)	1 (1.7%)	7 (11.7%)
Some college	10 (16.7%)	12 (20%)	22 (36.7%)
College degree	1 (1.7%)	9 (15%)	10 (16.7%)
Graduate degree	2 (3.3%)	5 (8.3%)	7 (11.7%)
Living situation			
With family/relatives	21 (35%)	12 (20%)	33 (55%)
Alone	6 (10%)	6 (10%)	12 (20%)
With non-related individuals	6 (10%)	9 (15%)	15 (25%)
Employment			
Full-time	3 (5%)	5 (8.3%)	8 (13.3%)
Part-time	4 (6.7%)	3 (5%)	7 (11.7%)
Retired	0	4 (6.7%)	4 (6.7%)
Student	4 (6.7%)	1 (1.7%)	5 (8.3%)
Unemployed	22 (36.7%)	14 (23.3%)	36 (60%)
Nam-Powers score (*SD*)	42.15 (32.12)	61.63 (28.35)	50.92 (31.77)
Diagnostic category			
Mood/anxiety-related	16 (26.7%)	24 (40%)	40 (66.7%)
Schizophrenia spectrum/psychosis	17 (28.3%)	3 (5%)	20 (33.3%)
Language preference			
English	14 (23.3%)	17 (28.3%)	31 (51.7%)
Other	19 (31.7%)	10 (16.6%)	29 (48.3%)
Estimated # of lifetime therapy sessions (*SD*)	25.97 (48.37)	42.93 (72.17)	33.6 (60.30)

Note. M = mean; SD = standard deviation.

Client Characteristic Measures

Perceptions of problems. The perceptual rating scale (PERCEPT) was designed in a previous study (i.e., Zane et al., 2005) and is an 11-item self-report measure assessing how clients perceive interpersonal problems often presented in psychotherapy. Clients were asked to answer the PERCEPT items in reference to an important interpersonal problem experienced within the past 12 months. Sample items were "How controllable was the problem?" and "How shameful did you feel about the problem?" and responses were rated on a 4-point scale from 0 (*not at all*) to 3 (*extremely*). Zane et al. (2005) conducted an exploratory factory analysis of the PERCEPT, yielding two major factors. Problem Distress included items that assessed the extent to which the problem was threatening, shameful, anxiety producing, and stressful. Zane et al. found the internal consistency to be adequate, with a Cronbach's α of .74. The internal consistency was also .74 with the current sample. Problem Controllability included items that assessed the extent to which the problem was controllable, solvable, predictable, and caused by internal as opposed to external factors. Zane et al. found the internal consistency Cronbach's α to be .74. In the current sample, the internal consistency was marginally adequate at .59.

Coping style. Coping style was assessed using the modified version of the situational COPE scale (Carver, Scheier, & Weintraub, 1989), a 60-item self-report measure sampling 15 domains of coping. Clients were asked to answer the COPE items in reference to the same interpersonal problem as the PERCEPT scale, and rated their frequency of use of each coping strategy on a 4-point scale ranging from 0 (*not at all*) to 3 (*fairly often*). Carver et al. (1989) found acceptable internal consistency, with only one subscale (mental disengagement) falling below a Cronbach's α of .60.

Factor analytic research on the COPE scale (Litman, 2006) has shown that subscales do not load clear onto Carver et al.'s "problem-focused" and "emotion-focused" coping dimensions, but rather on three different dimensions of "self-sufficient approach-oriented coping," "socially-supported approach-oriented coping," and "avoidant-oriented coping." In the current study, three COPE subscales (suppression of competing activities, acceptance, and mental disengagement) were excluded from further analysis because of their low reliabilities (Cronbach's $\alpha = .27$, .52, and .46, respectively). With the remaining 12 subscales, we combined Litman's (2006) two approach-oriented dimensions to create the first coping composite that included nine subscales (i.e., active coping, planning, restraint coping, seeking social support—instrumental, seeking social support—emotional, positive reinterpretation and growth, turning to religion, focusing on and venting of emotions, and humor).

Sample items include "I make a plan of action" and "I look for something good in what is happening." This composite appeared to reflect the extent to which a person actively attempted to cope with problems, so it was labeled Active Coping. It had a Cronbach's α of .92. The second composite, which corresponded to Litman's avoidant-oriented coping, included the three remaining subscales (i.e., denial, behavioral disengagement, and drug-alcohol disengagement). Sample items include "I act as though it hasn't even happened" and "I just give up trying to reach my goal." This type of coping seemed to reflect the extent to which people avoided or emotionally distanced themselves from their problems, so it was labeled Avoidant Coping. The Cronbach's α for the current sample was .76.

Treatment credibility. The Treatment Goals Measure (TGM) was designed in a previous study (i.e., Zane et al., 2005), which constituted revisions of certain items from the Therapist Orientation Questionnaire (Sundland & Anthony, 1980). The TGM assessed client attitudes and beliefs about the importance of focusing on certain issues or problems in therapy, and included

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therapists who saw more than one client for the study, the average number of clients was 5.2. There were two therapists who each saw the most number of clients ($n = 13$ and 10). We ran a series of t tests between the two therapists on the outcome variables of interest, and significance levels of differences in client outcome ratings were all greater than .05.

items that asked clients questions about how important it is that therapy help them reduce their anxiety, get along with people, understand their feelings better, or release their feelings and frustrations. Each item on the TGM was rated using a 5-point scale ranging from 1 (*unimportant*) to 5 (*important*). Zane et al. (2005) conducted an exploratory factor analysis and all 18 items loaded onto one factor that accounted for 58% of the variance and seemed to reflect the extent to which therapy served several functions or had multiple benefits. Higher scores on the TGM reflect greater expectation of benefiting from therapy. This single dimension appeared to reflect a general belief that therapy was effective and helpful, and as such the TGM was considered to be a measure of treatment credibility. As with Zane et al., the internal consistency of the Treatment Credibility factor had a Cronbach's α of .95 with the current sample.

Somatic symptoms. The somatization subscale of the Symptom Checklist-90 Revised (SCL-90-R; Derogatis, 1983) was used to assess clients' levels of somatic symptoms prior to entering treatment. The SCL-90-R is a widely used measure and consists of a 90-item self-report symptom checklist designed for use with a broad spectrum of individuals, ranging from nonpatient respondents to individuals with psychiatric disorders. The somatization subscale consists of 12 items measuring the amount of distress felt in the past week due to bodily symptoms such as headaches, pains in lower back, nausea and upset stomach, on a scale of 0 (*not at all*) to 4 (*extremely*). Derogatis and Fitzpatrick (2004) reported an internal consistency Cronbach's α of .86. Its Cronbach's α with the current sample was .92.

Outcome Measures

Psychosocial functioning. The Global Assessment of Functioning (GAF) scale from the *Diagnostic and Statistical Manual of Mental Disorders* Fourth Edition (American Psychiatric Association, 1994) was used as a measure to assess the overall level of clients' psychosocial functioning. The GAF has been found to be a valid measure of clinical outcomes (Jones, Thornicroft, Coffey, & Dunn, 1995). Therapists rated clients between one and 100, with higher scores reflecting better psychosocial functioning.

Psychiatric symptomatology. Therapists used the Brief Psychiatric Rating Scale (BPRS; Overall & Gorham, 1962) to rate the psychiatric condition of clients across a variety of discrete symptom areas. The measure includes 18 single-item symptom ratings, each with a 7-point scale of severity ranging from 0 (*not assessed*) and 1 (*not present*) to 7 (*extremely severe*). Raters are instructed to rate symptoms based on patient verbal report (e.g., somatic concern, anxiety), clinical observations (e.g., tension, blunted affect), or both verbal report and clinical observations (e.g., emotional withdrawal, depressed mood). Lachar et al. (2001) found that the BPRS consisted of four highly reliable and valid subscales assessing four types of clinical symptoms: Client Resistance (e.g., uncooperativeness—"Evidence of resistance, unfriendliness, resentment, and lack of readiness to cooperate with the interviewer."), Positive Symptoms (e.g., disorientation—"Confusion or lack of proper association for person, place, or time"), Negative Symptoms (e.g., blunted affect—"Reduced emotional tone, apparent lack or normal feeling or involvement"), and Psychological Discomfort (e.g., depressive mood—"Despondency in mood, sadness. Rate only degree of despondency; do not rate on basis of inferences concerning depression based upon general retardation and somatic complaints.").

Client Resistance was precluded from our analyses, as it was not an outcome variable of interest in the current study. For the Positive Symptoms subscale, Lachar et al. (2002) reported a Cronbach's α of .77; in the current sample, it was .82 for both the pretreatment and post-treatment ratings. For the Negative Symptoms subscale, Lachar et al. reported a Cronbach's α of .80; in the current sample it was .74 and .71 for the pretreatment and posttreatment ratings, respectively. For the Psychological Discomfort subscale, Lachar et al. reported a Cronbach's α of .68; in the current sample, it was .79 and .83 for the pretreatment and posttreatment ratings, respectively.

Procedures

An intake therapist initially screened clients over the telephone to determine their suitability for participation in the study. As part of standard telephone intake procedure, clients were asked their contact information, age, place of residence, and ethnicity. Based on this information, the White American and Asian American clients were further asked about their interest in participating in the study. Eligibility was based on consent to the pretreatment and postfourth session interviews by research staff and sufficient capacity to complete all the measures in English. A total of 80 clients were approached for participation and 15 declined. Research staff contacted the 65 clients who agreed to participate and scheduled face-to-face meetings to discuss the general procedures and obtain informed consent. Clients were paid $15 for their participation, and those who agreed to be in the study were randomly assigned a therapist who could linguistically match the client's language preferences. Five clients left therapy before completing four sessions of treatment. The research staff attempted to contact these clients at least twice to collect their posttreatment data, but none responded to the follow-up inquiries. Attrition analyses found no significant differences between these clients and those who remained in treatment.

Participants completed the demographic questionnaire, the PERCEPT scale, the COPE scale, the TGM, and the SCL-90-R prior to their first therapy session. All clients completed the measures within a 60-minute period. Therapists assessed their clients' level of functioning (via GAF) and psychiatric symptomatology (via BPRS) after the first session and again after the fourth session of the client's treatment.

Data Analysis

Our major interests were in examining which distal variables (client demographic characteristics) were related to more proximal variables (clinical characteristics) that were then predictive of outcomes. All analyses were conducted using SPSS version 12.0.1 and SAS version 9.3. Two sets of regression analyses were used in which we first regressed clinical characteristics (i.e., problem controllability, problem distress, active coping style, avoidant coping style, treatment credibility, and somatic symptoms) on client demographic characteristics (i.e., age, gender, ethnicity, socioeconomic status, and language preference) to examine important cultural and sociodemographic variations. We conducted analyses on each separate clinical characteristic, yielding a total of six separate regressions.

To examine which clinical characteristics were predictive of the psychotherapy outcomes, we regressed each outcome variable on clinical characteristics while controlling for client diagnosis and pretreatment measures of the outcome variables. In this case, we ran analyses on each of the four psychotherapy outcome variables.

Multiple regression analysis was performed in which each set of predictors were entered into the model simultaneously to control for the effects of other predictors in the model. For each regression, the statistical significance of the effects were evaluated using an overall significance level of .05 and a Bonferroni adjustment to evaluate the individual effects while controlling the overall Type I error. With p-values based on two-tailed tests, statistically insignificant effects were dropped from the model and the estimated effects for the remaining predictors presented. We then used our results from the two sets of regression analyses to guide our tests for the indirect effects.

Tests for the indirect effects involved a bootstrapping method used by Preacher and Hayes (2008) with $N = 5000$ bootstrap resamples. Bootstrapping is a nonparametric resampling procedure that is used for testing mediation but that does not require that the sampling distribution be normal, an assumption that may not hold in small sample sizes (Preacher & Hayes, 2008). Bootstrapping involves repeated sampling with replacement from the original data set and estimates the indirect effect in each resampled data set. By repeating this process n times, an empirical approximation of the sampling distribution is created and used to construct point estimates, standard errors, and confidence intervals (CI) for the indirect effects. Point estimates of the indirect effects are considered significant when zero is not contained within the confidence

Table 2
Means, Standard Deviations, and Correlations of Clinical Characteristics and Outcome Variables (N = 60)

Variable	1	2	3	4	5	6	7	8	9	10
1. Problem controllability	–									
2. Problem distress	− .02	–								
3. Active coping	.33**	− .14	–							
4. Avoidant coping	− .28*	− .03	− .19	–						
5. Treatment credibility	− .20	− .02	.24	− .06	–					
6. Somatic symptoms	− .26*	.31*	− .25	.27*	.19	–				
7. Psychosocial functioning	− .37**	.02	.35**	− .35**	− .01	− .48**	–			
8. Positive symptoms	.08	− .22	− .22	.14	.04	.33**	− .69**	–		
9. Negative symptoms	− .25	− .01	− .25	.36**	− .14	.23	− .51**	.58**	–	
10. Psychological discomfort	− .31*	.10	− .17	.32*	.03	.31*	− .67**	.61**	.65**	–
M	7.79	12.09	52.83	8.23	75.50	16.68	59.45	8.15	6.43	15.67
SD	3.23	4.13	18.81	5.25	14.47	12.52	12.90	4.15	3.47	6.02

Note. *M* = mean; *SD* = standard deviation.
*$p < .05$. **$p < .01$.

intervals (Preacher & Hayes, 2008; Shrout & Bolger, 2002). In our bootstrap analysis, pretreatment measures of the outcome variables were entered as control variables, and 95% CI were estimated.

Results

Client Demographic Characteristics Related to Clinical Characteristics

Table 2 shows the intercorrelations of the study variables. Table 3 shows the results from the first set of regression analyses that indicated those client demographic characteristics that were related to clinical characteristics. Standardized regression coefficients are provided here, and raw regression coefficients are provided in Table 3. Clients who preferred to speak a non-English language in treatment perceived their problems as being less controllable than English preference clients ($\beta = -.42$, $p < .01$). Women were more likely to use active coping styles compared to men ($\beta = .29$, $p < .05$). Asian American clients indicated using active coping styles more so than White American clients ($\beta = .37$, $p < .01$), and non-English preference clients were less likely to use active coping styles compared to English preference clients ($\beta = -.35$, $p < .01$). Non-English preference clients were more likely to use avoidant coping styles compared to clients who preferred to speak English ($\beta = .31$, $p < .05$). We did not find demographic or ethnic variations on problem distress and somatic symptoms. Client age and socioeconomic status were not related to any of the clinical characteristics.

Clinical Characteristics as Predictors of Short-term Outcomes

After controlling for client diagnosis and pretreatment measures of the respective outcome variable, certain clinical characteristics were predictive of three of the four short-term psychotherapy outcomes (see Table 4). Standardized regression coefficients are provided here, and raw

Table 3
Regression Results Predicting Clinical Characteristics (N = 60)

	Problem controllability		Problem distress		Active coping		Avoidant coping		Treatment credibility		Somatic symptoms	
	B (*SE*)	β	B (*SE*)	β	B (*SE*)	β	B (*SE*)	β	B (*SE*)	β	B (*SE*)	β
Age	.02 (.03)	.09	− .06 (.05)	− .18	− .21(.20)	− .14	.01 (.06)	.02	.13 (.18)	.12	.17 (.15)	.17
Gender[a]	− .64 (.71)	− .12	− .39 (1.05)	− .05	10.96 (4.36)	.29*	.86 (1.37)	.08	6.50(3.84)	.23	.63 (3.36)	.03
Ethnicity[b]	.75 (.77)	.14	− 2.25 (1.14)	− .27	13.87(4.73)	.37**	1.52 (1.49)	.15	2.69 (4.17)	.10	1.10 (3.64)	.04
SES	.01 (.01)	.04	.02 (.02)	.18	.03 (.08)	.05	− .01 (.02)	.01	.06 (.07)	.14	.07 (.06)	.17
Language[c]	− 1.43(1.47)	− .42**	− 1.43 (1.12)	− .18	− 13.09(4.66)	− .35**	3.21 (1.47)	.31*	− 5.49 (4.11)	− .19	2.84 (3.59)	.11

Note. *SE* = standard error; SES = socioeconomic status.
B = the maximum likelihood estimate of this effect. *SE* is the standard error of the estimate. β is the standardized regression coefficient.
[a]0 = male, 1 = female.
[b]0 = White American, 1 = Asian American.
[c]0 = English, 1 = non-English.
*$p < .05$. **$p < .01$.

Table 4
Regression Results Predicting Psychotherapy Outcomes (N = 60)

Variable	B	*SE*	95% CI	β
Psychosocial functioning				
Pretreatment covariate	.60	.11	(0.37, 0.82)	.54***
Somatic symptoms	−.30	.10	(−0.51, −0.09)	−.29**
$R^2 = .48$, Adj $R^2 = .47$				
Positive symptoms				
Pre-treatment covariate	.47	.11	(0.24, 0.60)	.47***
$R^2 = .28$, Adj $R^2 = .25$				
Negative symptoms				
Pretreatment covariate	.59	.10	(0.34, 0.67)	.59***
Avoidant coping style	.05	.02	(0.04, 0.26)	.27**
$R^2 = .47$, Adj $R^2 = .45$				
Psychological discomfort				
Pretreatment covariate	.61	.10	(0.40, 0.78)	.61***
Avoidant coping style	.05	.02	(0.09, 0.53)	.27**
$R^2 = .46$, Adj $R^2 = .45$				

Note. *SE* = standard error; CI = confidence interval.
B is the maximum likelihood estimate of this effect. *SE* is the standard error of the estimate. 95% CI is the estimated 95% confidence interval for the corresponding parameter. β is the standardized regression coefficient.
*$p < .05$. **$p < .01$. ***$p < .001$ based on two-tailed tests.

regression coefficients are provided in Table 4. Somatic symptoms predicted psychosocial functioning. Clients with higher levels of somatic symptoms, relative to clients with lower levels of somatic symptoms, experienced worse psychosocial functioning ($\beta = -.29$, $p < .01$) after short-term treatment. Avoidant coping style predicted both negative symptoms and psychological discomfort. Clients who were more likely to use an avoidant coping style, compared to those who were less likely to use an avoidant coping style, experienced more negative symptoms ($\beta = .27$, $p < .01$) and more psychological discomfort ($\beta = .27$, $p < .01$) at posttreatment. Problem controllability, problem distress, active coping style, and treatment credibility were not related to any of the outcomes.

Indirect Effects of Language Preference on Psychotherapy Outcomes

The bootstrapping analysis indicated that preferring to speak a non-English language in treatment was related to avoidant coping style, which was related to more negative symptoms and more psychological discomfort after short-term treatment. Non-English preference clients tended to use more avoidant coping styles ($\beta = .35$, $B = 3.55$, standard error [*SE*] = 1.28, $p < .01$), and clients with avoidant coping styles had more psychological discomfort after short-term treatment ($\beta = .27$, $B = .33$, $SE = .12$, $p < .01$), even after controlling for pretreatment measures of psychological discomfort (bias-corrected and accelerated 95% CI .33, 2.55). Similarly, non-English preference clients tended to use more avoidant coping styles ($\beta = .35$, $B = 3.55$, $SE = 1.28$, $p < .01$), and clients with avoidant coping styles had more negative symptoms after short-term treatment ($\beta = .27$, $B = .15$, $SE = .06$, $p < .01$), controlling for pretreatment measures of negative symptoms (bias-corrected and accelerated 95% CI .13, 1.21). Overall, language preference in treatment had an indirect effect on outcome through avoidant coping style.

Discussion

We investigated the role of client characteristics in predicting psychotherapy outcomes among a diverse group of Asian American and White American outpatients in a short-term, naturalistic

treatment setting. Adopting a proximal-distal framework (Sue & Zane, 1987), we examined the more proximal aspects of race/ethnicity and other demographic characteristics in an effort to better capture the psychological underpinnings of these broader dimensions that affect outcomes. We focused on a select number of clinical characteristics identified in previous research as being important in the treatment of culturally diverse clients. Although scholars have often discussed the importance of these client variables in addressing cultural issues in treatment, there have been few empirical investigations linking these client variables to treatment outcomes. The prospective design of this study allowed for a systematic determination of which client factors prior to treatment were actually predictive of outcomes. With this approach, researchers may begin to gain a better understanding as to *why* members of Asian American groups, and perhaps members of other racial/ethnic minority groups, have fared less well in treatment.

In the current study, we were able to detect an effect on outcomes by a specific characteristic that is often associated with racial and ethnic diversity–language preference. Smith, Domenech Rodriguez, and Bernal (2011) have recommended that, whenever feasible, psychotherapy should be conducted in the client's preferred language to match client preferences and ultimately improve outcomes. In Griner and Smith's (2006) meta-analysis of culturally adapted mental health interventions, 74% of the studies they reviewed matched clients to therapists on native language. These types of findings and recommendations highlight the importance of considering language in the context of treatment with culturally diverse clients. While language preference is often associated with racial/ethnic minority status, findings from our study highlight the importance of considering language preference in nonminority clients as well. Nearly one half of the sample (48%), including 19 Asian American and 10 White American clients, preferred to speak a non-English language in treatment, and thus these clients were matched to bilingual therapists who conducted treatment in the client's preferred language. Nevertheless, these clients experienced worse outcomes after short-term treatment compared to clients who preferred to speak English.

Language preference appears to be important, but rather than having a direct effect on outcomes, language preference had an indirect effect through avoidant coping style. Assuming that non-English preference clients preferred to speak in their native language, this may reflect a broader tendency of these clients to be oriented towards coping styles or control strategies to which they have been socialized in their country of origin. Individuals from non-Western cultures, such as Asian Americans, might be more oriented towards secondary coping strategies that primarily encourage acceptance and reframing of difficult situations (Hall, Hong, Zane, & Meyer, 2011; Weisz, Rothbaum, & Blackburn, 1984). In the Western context, these types of secondary control strategies oftentimes may be seen as forms of avoidant coping.

Coping serves to regulate emotions (Folkman, Lazarus, Gruen, & DeLongis, 1986) and clients who vary in coping strategies have been found to respond differently to treatment (Beutler et al., 2011). Our results appear to be consistent with the general consensus that coping styles that are more emotion-focused, such as escape-avoidance and distancing, are associated with more psychological distress (Yeh, Arora, & Wu, 2006). However, it is important to recognize that an individual's coping style may largely reflect the values and ideals of that person's culture (Chun, Moos, & Cronkite, 2006; Kim, Sherman, & Taylor, 2008), such that, in general, people from Western cultures tend to use active coping strategies to directly change one's external sources of stress, whereas people from non-Western cultures tend to rely on less direct coping strategies that modify one's internal responses to these stressors (Chun et al., 2006).

This finding is of clinical interest because an avoidant coping style is often not emphasized in Western psychotherapy and in fact may be discouraged and considered maladaptive. Therapists oftentimes encourage clients to manage one's stressors and regulate emotions by actively targeting sources of the distress, but this is in direct contrast to the coping styles presented by non-English preference clients. This, in turn, may create an impasse in therapy for those culturally diverse clients who may be less familiar or comfortable with the problem-focused, active coping approach often embraced in Western psychotherapy (Hall et al., 2011). This might be an important issue of cultural competence in which therapists must account for and address an avoidant coping style without overpathologizing this client tendency.

In our sample, Asian American clients indicated using an active coping style significantly more so than White American clients. This finding was unexpected, but it may reflect a

measurement-related limitation of the measure used and in particular, various types of coping that constituted the active and avoidant coping orientations. In terms of the specific COPE domains, Asian American clients used significantly more positive reinterpretation and growth as well as seeking social support than White American clients, and these forms of coping were included in the active coping composite to be consistent and comparable to previous studies (Zane et al., 2005; Litman, 2006). However, it may be argued that positive reinterpretation and growth is not an *active* coping style per se, and is actually more aligned with secondary control strategies that modify internal states. Prior studies have shown that seeking out social support may provide buffering effects on stressors, especially for Asian Americans (Chen, Mallinckrodt, & Mobley, 2002). Further investigation of this seemingly discrepant finding is warranted, but it is also worth noting that active coping was not predictive of any types of outcomes in this study.

Somatic symptoms constituted another client characteristic that was predictive of treatment outcome. Somatic symptoms can involve cultural idioms of distress or culturally sanctioned help-seeking behaviors, especially among Asians and Asian Americans (Hwang et al., 2008). This has often been attributed to the stigma of mental illness (Yen et al., 2000) and to Asian cultural traditions that emphasize a more holistic view of the body and mind, leading to a greater focus on physical rather than emotional symptoms (Lin & Cheung, 1999). In this study, there were no racial or other demographic differences on clients who expressed somatic symptoms, but this finding is consistent with results from cross-national studies that have found somatic symptoms to be the most common clinical presentation of psychological distress (Simon, VonKorff, Piccinelli, Fullerton, & Ormel, 1999). Simon et al. (1999) as well as others (e.g., Weiss, Tram, Weisz, Rescorla, & Achenbach, 2007) have linked somatic symptom presentation to be more due to the process and expectations involved with help-seeking behavior rather than to a cultural variation in actual symptomatology.

It also has been suggested that "Western psychologization" is the more culturally specific symptom tendency that appears mostly in Western contexts (Ryder, Yang, Zhu, Yao, Yi, Heine, & Bagby, 2008). Previous research indicates that regardless of their origin (cultural variations in symptomatology or expectations associated with help seeking) somatic symptoms are clinically more ubiquitous than commonly believed.

Our findings point to the importance of directly addressing and accounting for somatic symptoms early in treatment given that they are negative predictors of outcome. Oftentimes, somatic symptoms are not addressed in psychotherapy, and this is unfortunate because somatic and psychiatric symptoms often co-occur and, in turn, respond to similar treatments (Bair et al., 2004). Moreover, an approach that attends to and alleviates somatic symptoms may effectively build therapist credibility (cf. Sue & Zane, 1987) and provide more culturally relevant mental health care for clients from cultures that foster a more holistic view of health.

Racial group status was examined as a distal variable based on both theoretical and empirical accounts of Eastern and Western differences in cultural values, norms, expressions of distress, treatment utilization, and outcomes. Asian Americans and White Americans are likely to possess different sets of cultural values (Kim et al., 2008), and Asian Americans are also likely to retain East Asian cultural tendencies despite exposure to Western norms and values (Abe-Kim, Okazaki, & Goto, 2001). There is considerable evidence in the cross-cultural psychological literature that speaks to Asian and White differences, which served as justification of our racial groupings and subsequent comparisons.

However, our overall sample was highly heterogeneous and included an "atypical" composition of White Americans (i.e., Russian immigrants), and this may have actually attenuated any racial effects that might exist with a "typical" White American (i.e., European American) sample. Racial/ethnic group status continues to be an important and useful construct for investigating cultural variations in outcomes, but this study exemplifies how extending the scope of analysis beyond race/ethnicity may at times, yield more clinically informative findings. Furthermore, this appears to speak to the great amount of heterogeneity within *all* racial/ethnic groups, and sole consideration of racial/ethnic categories provides limited information that carries the risk of glossing over or masking important racial, ethnic, and cultural variations (Trimble & Dickson, 2005). The proximal-distal approach is quite useful in addressing this issue.

Our findings should be considered in light of the study limitations. This was a naturalistic treatment study without predetermined inclusion and exclusion criteria, manipulated independent variables, and a limited sample size, which are not uncommon in naturalistic psychotherapy studies that have used pretreatment and posttreatment designs (e.g., Coppock, Owen, Zagarskas, & Schmidt, 2010; Miller & Saunders, 2011). Asian American clients tended to have more severe psychiatric diagnoses than White American clients; 28.3% of Asian American clients had disorders in the schizophrenia spectrum compared to 5% of the White American clients. As some have suggested, this difference may reflect the greater clinical severity of Asian American clients due to delayed help seeking and the underutilization of mental health services (e.g., Kim & Zane, 2004). Future research should obtain sufficient clinically diverse samples (e.g., sizeable samples of clients who vary in diagnoses) so that researchers can more definitively test whether or not initial diagnostic and clinical severity variations among ethnic and racial groups can partially account for differences in therapeutic outcomes.

We did not find problem controllability, problem distress, and treatment credibility to be related to outcome, which may have been measurement-related. In assessing treatment credibility, the data reflected a relatively high sample mean for the TGM, which utilizes a scaled continuum of "important" to "unimportant" in reference to various aspects of treatment. It is not surprising that clients who seek therapy would rate many of these items as being highly important, so it is possible that this measure did not fully capture what we had intended. The PERCEPT scale showed marginal reliability, which may have contributed to the null findings. This might be related to the small sample size or issues regarding measurement fit across racially diverse samples. It is also possible that the size of this clinical sample may have limited the detection of certain effects on treatment outcomes, though it is worth noting that effect size of the outcomes examined in this study (i.e., GAF and BPRS) did not substantially differ from prior studies that have used the same measures (e.g., Bailley, Lachar, Rhoades, Diefenbach, Espadas, & Varner, 2004; Junkert-Tress, Schnierda, Hartkamp, Schmidtz, & Tress, 2001; Petkari et al., 2011).

Although all clients had sufficient capacity to complete the measures in English and they could ask for comprehension assistance from the bilingual research staff, the administration of scales only in English may still have been problematic for some of them. Language use and preference is the most frequently used proxy variable for level of acculturation (Zane & Mak, 2003), but it is possible that we may have detected other differences had the level of acculturation been more directly measured in this highly diverse sample.

Previous research consistently has found that members of culturally diverse groups are more likely to terminate treatment early (U.S. DHHS, 2001), which indicates that problems are more likely to occur in the early stages of treatment (Zane et al., 2005). As such, the current study focused on examining short-term treatment outcomes, so it is unknown whether these client characteristics continue to predict outcomes over longer periods of time. We were unable to account for the type of psychotherapy used in treatment, and there is also the possibility that therapist or treatment process factors (e.g., working alliance) may have resulted in different types of outcomes. As we specifically chose to examine client variables, assessing therapist-related and process-related factors was beyond the scope of this investigation, but this would be a fruitful area for future studies.

Providing effective mental health treatment for Asian Americans and other ethnic minorities continues to be a major challenge in mental health care. A major strength of the study was its focus on those proximal factors that may have a more direct impact on psychotherapy outcomes. The findings support the utility of the proximal-distal approach (Sue & Zane, 1987). We found that factors related to racial group status do affect outcomes, but they may do so through important mediational pathways involving a more proximal client variable. This investigation begins to clarify *why* Asian Americans and other ethnic minority and immigrant populations historically have experienced differential treatment outcomes. The findings also identify certain client factors (e.g., avoidant coping style, somatic tendencies) that may be used as promising starting points for achieving effective treatment with culturally diverse clientele.

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