Do Therapist Cultural Characteristics Influence the Outcome of Substance Abuse Treatment for Spanish-Speaking Adults?

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This secondary data analysis of the Clinical Trials Network’s Motivational Enhancement Therapy effectiveness trial with Spanish-speaking substance users examined whether the degree of birthplace and acculturation similarities between clients and therapists, as well as the therapists’ own level of acculturation and birthplace were related to the clients’ participation in treatment and level of substance use during outpatient substance use treatment. Sixteen therapists and their 235 clients from the larger effectiveness trial were included in the analyses for this study. Results of the multilevel regression models for client participation in substance use treatment and client days of substance use, taking into account within and between therapist cultural characteristics, revealed that birthplace match and acculturation similarity between each therapist and his or her clients did not predict client outcomes. Instead, therapists’ birthplace and level of acculturation independently predicted days of substance use, but not treatment participation for monolingual Spanish-speaking clients. These findings are discussed in the context of the results of the main effectiveness trial and of psychotherapy research with ethnic minority populations, in particular Hispanic minorities.

Keywords: treatment, Hispanic, therapist, acculturation, cultural match

The Hispanic population is the fastest growing minority population, expected to increase from 14.8% (44.3 million; U.S. Census Bureau, 2007) to 24.4% by the year 2050 (U.S. Census Bureau, 2004). Of the U.S. population 5 years of age and older, 32.1 million speak Spanish at home (U.S. Census Bureau, 2005). Given such dramatic growth, the field is challenged to develop culturally and linguistically competent addiction treatments that effectively meet the needs of Hispanics.

Wells, Klap, Koike, and Sherbourne (2001) reported that needs for alcohol and drug abuse treatment are not met for a sizable sample of the Hispanic population. Under utilization of treatment services is even more pronounced for monolingual Spanish-speaking clients. These findings are discussed in the context of the results of the main effectiveness trial and of psychotherapy research with ethnic minority populations, in particular Hispanic minorities.
speaking immigrants (Alegria et al., 2007). Unfortunately, there is limited research on evidence-based, culturally appropriate substance abuse treatment for monolingual Spanish-speaking adult populations. To address this gap and ultimately improve health care, Vega and Lopez (2001) recommended increased cultural competency training for therapists working with Hispanics. However, little is known about the therapist skills and characteristics that would facilitate cultural competence and lead to positive treatment outcomes for monolingual Spanish clients.

One of the most widely proposed mechanisms in cultural competency has been to match client and their therapists on a specific shared cultural characteristic. It is expected that therapists from the same culture as the clients will be better able to communicate and understand the language and cultural background of the clients than therapists from other cultures (Flaskerud, 1986). In Hispanic populations, Alegria and colleagues (2006) suggested that Hispanic clients may view therapists with similar ethnic backgrounds as more empathic. Particularly within the Hispanic culture, empathy and warmth are key elements that convey trust and honesty among people who share cultural values (W. D. Sue & Sue, 1990).

Partly because of the difficulty of defining the aspects of the culture that are relevant to psychotherapy or in particular to substance abuse treatment, researchers have not tested directly the assumption that cultural match between therapists and clients is related to therapy outcomes (Karlsson, 2005).

As a result, cultural match research has been reformulated into the study of ethnic match, which refers to the matching of a client with a therapist of the same ethnicity (Maramba & Hall, 2002). Results of research on client–therapist ethnic match have been mixed. A review of ethnic match studies from the early 1990s yielded small effects sizes (Maramba & Hall, 2002). However, for monolingual Spanish-speaking Mexican Americans, the results of one study, which examined treatment outcomes (i.e., premature termination, total number of sessions, and global assessment scale) from data spanning 15 years of outpatient mental health services in the Los Angeles district, suggested that ethnic matching predicted positive treatment outcomes (S. Sue, Fujino, Ho, Takeuchi, & Zane, 1991). Therapist–client ethnic similarity in Hispanic populations has been associated with better client treatment engagement and participation as well as higher levels of abstinance than for therapist–client dissimilar dyads (Alegria et al., 2006; Alvarez, Olson, Jason, Davis, & Ferrari, 2004; Diaz, Prigerson, Desai, & Rosenheck, 2001; Fiorentine & Hillhouse, 1999; Gamst, Dana, Der-Karabetian, & Kramer, 2000; Malgady & Zayas, 2001). The conclusion that ethnic matching in Hispanic populations yields positive results in psychotherapy is based on studies that compare Hispanics to other ethnic groups (e.g., Asian Americans, African Americans, White). However, for a group as heterogeneous as Hispanic Americans, the question still remains: What factors in ethnic matching account for the positive results?

Critics of ethnic matching designs in psychotherapy research have argued that even when clients and their therapists are ethnically similar, they may differ in cultural attitudes and levels of acculturation; thus, ethnic match does not ensure cultural match (Maramba & Hall, 2002). Karlsson (2005) echoed this sentiment in his recent review of the literature on ethnic matching arguing for examination of within-group variables, such as levels of acculturation, for acquiring a complete understanding of the role of ethnic matching in psychotherapy research.

After searching PsycINFO and MEDLINE, we found no published study that explored the relationships between acculturation level of Hispanic therapists, their clients, and the clients’ substance abuse treatment outcome. Contemporary views on acculturation maintain that it is a bidimensional process, whereby an individual adjusts and integrates features of both the original and dominant cultures (LaFromboise, Coleman, & Gerton, 1993; Tadmor & Tetlock, 2006). Although some substance abuse treatment research has examined acculturation in clients (Alegria et al., 2008; Arroyo, Miller, & Tonigan, 2003; Ortega, Rosenheck, Alegria, & Desai, 2000; Vega, Alderete, Kolody, & Aguilar-Gaxiola, 1998; Vega, Kolody, Aguilar-Gaxiola, & Catalano, 1999), there is a lack of knowledge regarding the impact that therapists’ level of acculturation may have on the clients’ outcome in therapy. Thus, this study sought to examine the influence of therapist acculturation on client outcomes in two ways, by looking at the similarity between therapist and client acculturation levels as well as by examining the therapist’s individual level of acculturation.

In the present study, we examined whether the similarity in birthplace and level of acculturation between clients and therapists were related to the clients’ participation in treatment and level of substance use in the 4 months of outpatient treatment. In this case, similarity in birthplace was defined by whether Hispanic therapists and their clients were born in Latin America (including Puerto Rico) or in the United States. In addition, the extent of similarity in acculturation of the clients and their therapists was determined by examining both Hispanicism and Americanism differences in scores. Specifically, we examined two research questions. First, is the match between client and therapist birthplace and Hispanicism/Americanism related to client’s participation and level of substance use in treatment? Second, is the therapists’ birthplace and level of Hispanicism/Americanism related to the clients’ participation and level of substance use in treatment?

These two questions were evaluated using the following five hypotheses: Hypothesis 1: (a) Clients of therapists with a matched birthplace will have better outcomes during treatment; and (b) Clients of therapists with more similar Hispanicism and Americanism levels will have better outcomes during treatment. Hypothesis 2: (a) Clients of therapists born in Latin America will have better outcomes than clients of therapists not born in Latin America; (b) Therapists’ Hispanicism will be positively related to client outcomes; and (c) Therapists’ Americanism will be inversely related to client outcomes.

Method

Participants

The participants were 16 therapists from four community substance abuse treatment agencies in Colorado, Florida, New Mexico, and New York, who volunteered to participate and were randomized to be trained and conduct Motivational Enhancement Therapy (MET; Miller, Zweben, DiClemente, & Rychtarik, 1992) or standard individual counseling and the 235 clients randomly assigned to these therapists. Therapists from one site in the larger trial did not provide cultural data about themselves; therefore, therapists and participants from this site were not included in this study. From the 235 participants, 224 with complete data on their participation in the treatment agency at follow-up, and 227 with
data on their primary drug use at follow-up were included in the analyses.

**Therapists.** Therapists at each participating agency with no prior motivational interviewing or motivation enhancement therapy training were eligible to participate in this trial provided that they demonstrated an adequate level of Spanish fluency. Using an objective test developed by the first and last authors of this manuscript, who are bilingual Hispanic researchers, the Spanish fluency of each therapist was determined. The test consisted of the therapists’ oral responses to two scenarios (i.e., description of educational background and a challenging counseling experience), in which Spanish language comprehension, topic development, expression clarity, and discussion of a case was evaluated \(^1\) (Suarez-Morales et al., 2007). At least four therapists who were eligible were then randomly assigned to either MET or standard counseling at each site. All counselors agreed to follow study procedures, including completing self-reports about their educational history, using specified therapeutic techniques, and audio-taping all study sessions for supervisory and independent review. Those assigned to the MET condition also agreed to training and supervision in Spanish MET for the duration of the study.

Table 1 summarizes the characteristics of the therapists included in this study. Their nationalities varied widely. Although all therapists were bilingual, 10 out of 16 therapists indicated their primary language as Spanish.

**Clients.** The clients in this study were described in detail in Carroll et al. (2009). The subset of participants who were assigned to the 16 therapists examined in this study is described in Table 1. Participants were primarily Spanish-speaking substance users using individuals seeking outpatient treatment at each participating site. Most of the participants were of Mexican heritage (43%), with 14% Puerto Rican, 10% Cuban, and 16% U.S. born Hispanics. Of all the clients, 69.8% were mandated to treatment and 57.9% were

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### Table 1

**Description of Therapist and Client Characteristics**

<table>
<thead>
<tr>
<th>Therapist (a)</th>
<th>Client (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M (SD) or N (%)</strong></td>
<td><strong>M (SD) or N (%)</strong></td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>10 (62.5)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>38.8 (12.1)</td>
</tr>
<tr>
<td><strong>Years of education</strong></td>
<td>15.0 (5.5)</td>
</tr>
<tr>
<td><strong>Employed</strong></td>
<td>16 (100.0)</td>
</tr>
<tr>
<td><strong>Spanish is primary language</strong></td>
<td>10 (62.5)</td>
</tr>
<tr>
<td><strong>Hispanicism</strong></td>
<td>3.9 (0.7)</td>
</tr>
<tr>
<td><strong>Americanism</strong></td>
<td>4.2 (1.0)</td>
</tr>
<tr>
<td><strong>Years living in the United States</strong></td>
<td>30.5 (16.0)</td>
</tr>
<tr>
<td><strong>Birthplace</strong> (Latin America)</td>
<td>10 (58.8)</td>
</tr>
<tr>
<td><strong>Mexico</strong></td>
<td>2 (12.5)</td>
</tr>
<tr>
<td><strong>Puerto Rico</strong></td>
<td>2 (12.5)</td>
</tr>
<tr>
<td><strong>Cuba</strong></td>
<td>1 (6.3)</td>
</tr>
<tr>
<td><strong>United States (excluding Puerto Rico)</strong></td>
<td>5 (31.3)</td>
</tr>
</tbody>
</table>

\(a\) \(n = 16\). \(b\) \(n = 235\). \(c\) Percent female vs. male. \(d\) Nations where less than 10 clients were born are not specified.

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**Procedures**

**Spanish MET protocol procedures.** The National Institute on Drug Abuse’s Clinical Trials Network (CTN), a nationwide network of 17 regional academic research centers in partnership with over 200 community substance abuse treatment programs (Hanson, Leshner, & Tai, 2002), recently completed a multisite randomized clinical trial that examined the effectiveness of Spanish MET compared with standard individual counseling with Spanish-speaking substance users in five outpatient treatment programs. This study is identical in design to another CTN-based MET study delivered in English (Ball et al., 2007). The Spanish MET trial afforded the opportunity to evaluate whether the therapists’ cultural variables impacted the clients’ treatment outcomes. Consistent with cultural/ethnic matching viewpoint, the therapists in this national trial delivered the treatment to monolingual Spanish-speaking clients entirely in Spanish.

In brief, monolingual Spanish-speaking individuals seeking treatment for substance use were randomly assigned at each site to receive either three individual sessions of manual-guided MET or three standard individual counseling sessions during the first 28 days of treatment (i.e., active phase of this treatment study). Spanish MET is a Spanish translation of the three-session MET (Farentinos & Obert, 2000) that had been based on the Project MATCH MET manual (Miller et al., 1992). All clients in this analysis attended all three experimental sessions during the active phase. After the active phase, clients remained in outpatient substance use treatment at their respective agencies. Treatment at each agency varied widely and consisted of participation on at least one mode of therapy including, individual treatment, group treatment, and self-help. All study assessments (baseline, 4-, 8-, and 16-weeks postrandomization) and treatment interventions were conducted entirely in Spanish.

**Measures**

**Instruments completed by therapists and client participants.**

**Participant characteristic form.** This six-item self-report instrument developed for this study gathered relevant demographic information about the country of origin of the therapists and the participants and each of their parents, language use, and the individual’s length of residence (years) in the United States. Therapist/participant country of origin was measured by asking the individual to indicate his or her country of birth from a list of Latin American nations (e.g., Mexico, Puerto Rico, Cuba, Venezuela), Spain, and United States. A dichotomous birthplace variable was created for this study, coded 1 for a birthplace in Latin America, including Puerto Rico and coded 0 for a birthplace outside of Latin America. Of clients, 83% were born in Latin America. On average, foreign-born clients had lived in the United States for 14.3 (SD = 11.8) years. Of therapists, 58.8% were born in Latin America. On average, foreign-born therapists had lived in the United States for 30.5 (SD = 16.0) years. For analyses examining matched birthplace for each dyad, a match was defined as a client and therapist sharing birthplace, whether Latin America or not.

**BIQ.** The Bicultural Involvement Questionnaire (BIQ; Zapocznik, Kurtines, & Fernandez, 1980) is a 24-item scale that

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\(^1\) Spanish fluency test is available from the corresponding author.
assesses the individual’s level of acculturation/involvement with either the Anglo American or Hispanic cultures. The BIQ is one of the few bidimensional acculturation measures designed specifically for Hispanics (Zane & Mak, 2003). Half of the items are Hispanic oriented and half are American oriented. The items assessing comfort with the English or Spanish language in specific settings (e.g., home, work, with friends) and enjoyment of American or Hispanic cultural activities are answered using a 5-point Likert scale ranging from 1 (not at all comfortable/not at all) to 5 (very comfortable/very much). A score is computed for each cultural dimension (i.e., Americanism and Hispanicism). In the present sample, the Cronbach’s alpha coefficients for the Americanism and Hispanicism scores were .98 and .76, respectively for therapists and .88 and .85, respectively for clients. In general, the average level of acculturation for therapists was 3.9 for Hispanicism and 4.2 for Americanism; whereas for clients was 4.4 for Hispanicism and 3.0 for Americanism. For analyses examining similarity in acculturation level, we created two difference scores between the therapists’ and clients’ Hispanicism and Americanism scores for each dyad, respectively, by subtracting the client scores from the therapist scores.

### Instruments completed by client participants.

#### Treatment utilization form.

Clients provided information about their level of treatment involvement in the treatment facility on a weekly basis during the active phase of treatment (i.e., first 28 days of treatment) and then again at the 1-month and 3-month follow-up after study treatment termination. Participation in treatment, defined as the number of reported days that the client was involved in treatment at the community treatment agency, was used in this study as a client outcome ($M = 87.50$, $SD = 36.02$).

**SUC.** The Substance Use Calendar (SUC) is an interview assessment, adapted from the Form–90 (Miller & Del Boca, 1994) and Time Line Follow-Back interview (Sobell & Sobell, 1992) of client-reported substance use (marijuana, cocaine, alcohol, methamphetamine, benzodiazepines, opioids, and other illicit drugs), which is completed for the 16 weeks of the study by a research assistant. Clients reported their primary substance at baseline ($ns$; alcohol = 136, cocaine = 51, marijuana = 28, opioids = 13, methamphetamines = 7). Using this information, an independent variable, “primary substance,” was created for this study, in which primary alcohol users (58%) and primary drug users (42%) were divided into two mutually exclusive categories. In addition, the number of days of use of clients’ primary substance from the SUC was used as a marker of client outcomes over the course of treatment ($M = 4.58$, $SD = 9.13$).

### Analytic Strategy

Multilevel regression models are similar to ordinary regression models but model relationships at more than one level (Bickel, 2007). As with ordinary regression analysis, Level 1 predictors explain variation in a dependent variable. Level 2 predictors, however, explain variation in the intercept and/or slope of the Level 1 regression equation. In this analysis, multilevel regression analysis was chosen for three reasons. First, these models account for the hierarchical nature of the data, that is, clients at Level 1 assigned to one of 16 therapists at Level 2. Second, these models permit Level 2 therapist characteristics to be modeled with random coefficients that allow for generalizations beyond the present sample of therapists. Third, these models are robust to unequal numbers of clients among therapists.

Two separate multilevel regression models with clients nested within therapists were conducted to test hypotheses using Mplus Version 5 (Muthén & Muthén, 1998–2007). In both models, two client characteristics, namely primary substance use (alcohol = 1 and illicit drug = 0) and mandated to treatment status (mandated = 1 and not mandated = 0), which differed by site, were controlled. The first model contained participation (i.e., total number of days at the treatment agency) as an outcome and the second model contained days of primary substance use as an outcome. Although participation was approximately normally distributed, days of substance use was positively skewed. Poisson regression was used with days of substance use to account for this positive skew. Fit statistics such as the comparative fit index (CFI) and root-mean-square error of approximation (RMSEA) were not available for Poisson analysis in Mplus (Muthén & Muthén, 1998–2007), so a chi-square test of differences in $2\times$loglikelihood between the model with predictors and a null (intercept only) model was used to determine if the difference in fit was statistically significant. The Bayesian information criterion (BIC; lower values suggest better fit) was then used to determine which model fit the data better (Schwarz, 1978). Both sets of hypotheses were analyzed with each model.

For the first set of hypotheses, birthplace match and the two difference scores, one for Hispanicism and one for Americanism, were entered on the within-level, for clients within each therapist. As mentioned before to test a more refined method of ethnic match, therapist’s and client’s birthplace was used, given that in this sample both therapists and clients were presumed to be of Hispanic ethnicity. Birthplace match was assigned a 1 if the client’s birthplace matched their therapist’s (either Latin America or U.S. born), and a 0 if not. To represent client-specific relationships, the relationships between each within-level predictor and outcome were estimated with a random intercept and slope coefficients.

For the second set of hypotheses, two continuous variables, therapists’ Hispanicism and Americanism, and one dichotomous variable, therapists’ birthplace, were entered in the model at the between-level to predict variation in the level-one random intercept. Therapists’ birthplace was defined with a dummy variable with therapists who were born in Latin America (including Puerto Rico) coded as 1 and those born in the United States or a nation outside of Latin America coded as 0.

### Results

Table 2 summarizes the results for the two multilevel models predicting participation in treatment and days of primary substance use.

#### Predictors of Participation

The fit of the multilevel model with participation was significantly different from the null model, $\chi^2(11; N = 2) = 773.9, p < .001$, and showed overall better fit with the BIC (4549.3 vs. 5263.5).

**Hypotheses (1a and b).** Therapist–client match on birthplace ($B = -0.04, SE = 0.10, ns$), the extent of difference in the
Hispanicism scores ($B = 0.01$, $SE = 0.06$, $ns$), and the extent of difference in the Americanism scores ($B = -0.04$, $SE = 0.03$, $ns$) between clients and their therapists were not significantly related to client participation in treatment, after controlling for primary substance and mandated to treatment status.

**Hypotheses (2a through c).** Therapists’ birthplace ($B = 0.14$, $SE = 0.13$, $ns$), therapists’ Hispanicism ($B = -0.09$, $SE = 0.12$, $ns$), and therapists’ Americanism ($B = -0.10$, $SE = 0.07$, $ns$) were not significantly related to client participation in treatment, after controlling for primary substance and mandated to treatment status.

**Predictors of Days of Substance Use**

The fit of the multilevel model with days of substance use was significantly different from the null model, $\chi^2(11; N = 2) = 940.3$, $p < .001$, and showed overall better fit with the BIC (2031.5 vs. 2912.3).

**Hypotheses (1a and b).** Therapist–client match on birthplace ($B = -0.54$, $SE = 0.65$, $ns$), the extent of difference in the Hispanicism scores ($B = 0.61$, $SE = 0.46$, $ns$), and the extent of difference in the Americanism scores ($B = -0.10$, $SE = 0.12$, $ns$) between clients and their therapists were not significantly related to the clients’ number of days of substance use, after controlling for primary substance and mandated to treatment status.

**Hypotheses (2a through c).** Therapists’ birthplace ($B = 0.99$, $SE = 0.49$, $p < .05$), therapists’ Hispanicism ($B = -1.03$, $SE = 0.38$, $p < .001$), and therapists’ Americanism ($B = 0.45$, $SE = 0.06$, $p < .001$) were significantly related to number of days of substance use, after controlling for primary substance and mandated to treatment status. On average, clients of therapists born in Latin America had greater substance use than clients of therapists born outside of Latin America. In addition, the results indicated that higher therapists’ Hispanicism was linked to fewer days of substance use, but higher therapists’ Americanism was linked to greater days of substance use.

**Discussion**

The results of this study suggest that birthplace match and cultural similarity between each therapist and his or her clients in level of acculturation may not be important as hypothesized with respect to clients’ outcome in substance abuse treatment in a sample of Spanish-speaking clients. Instead, therapists’ cultural characteristics, including birthplace and level of Americanism and Hispanicism, independently predict days of substance use for monolingual Spanish-speaking clients. However, therapists’ birthplace and level of acculturation are not related to clients’ participation in substance use treatment in this ethnic minority population. Because of the scarcity of information on therapist cultural characteristics as predictors of treatment outcome, in particular therapists serving Hispanic communities, the current study makes an important contribution to the field.

This investigation did not support the hypothesized effects of matching client and therapist on cultural characteristics to produce positive treatment effects. As suggested by the psychotherapy literature on cultural matching (Carlsson, 2005), we examined, in particular, whether similarity in client–therapist birthplace and level of acculturation in a Spanish-speaking sample had any bearing on client outcomes in substance abuse treatment. From the findings, we can conclude that beyond matching clients and therapists on ethnicity and language, as the design of the study established and as previous literature would suggest (Alegria, et al., 2006; Alvare et al., 2004; Diaz et al., 2001; Malgady & Zayas, 2001), there may not be any additional benefit in Hispanic populations of matching on cultural characteristics, such as birthplace (U.S. born vs. foreign born) and level of acculturation. Because this study is the first to examine the cultural match question in a substance abusing treatment population, further research should explore this question in clinical populations with other presenting problems (e.g., depression, anxiety) and using other psychotherapy modalities to determine if the findings are consistent across areas and treatments in Spanish-speaking populations.

On the other hand, we found initial evidence that suggests that individual cultural therapists’ characteristics, specifically level of acculturation, are related to their Spanish-speaking clients’ substance use patterns while in treatment. Based on the clinical literature with Hispanic clients (Andrés-Hyman, Ortiz, Añez, Paris, & Davidson, 2006; Añez, Paris, Bedregal, Davidson, & Grilo, 2005; Añez, Silva, Paris, & Bedregal, 2006), it may be that clients benefited from therapist expression of cultural nuances and values common to the Hispanic culture, as evidenced by the findings that high Hispanicism in therapists leads to decreased client substance use during treatment. For example, the Hispanic value of personalismo (personal) is the preference for relating on a personal, rather than formal or institutional level (Comas-Diaz, 1994; Delgado & Humm-Delgado, 1982). Therapists may have conducted therapy with a close, informal way of treating the clients, sharing personal information, and demonstrating caring by the use of appropriate touch (e.g., handshake, or pat on the shoulder). In contrast, culturally specific behaviors may not be readily utilized by therapists with high levels of Americanism. This is a possible explanation for the findings regarding therapists’ Amer-

### Table 2

**Multilevel Models Predicting Participation in Treatment and Days of Primary Substance Use**

<table>
<thead>
<tr>
<th></th>
<th>Participation$^a$</th>
<th>Days of use$^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>$SE$</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary substance$^c$</td>
<td>0.00</td>
<td>0.04</td>
</tr>
<tr>
<td>Mandated to treatment$^d$</td>
<td>0.17$^{**}$</td>
<td>0.06</td>
</tr>
<tr>
<td>Within-level$^e$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic match$^f$</td>
<td>-0.04</td>
<td>0.10</td>
</tr>
<tr>
<td>Hispanicism difference score</td>
<td>0.01</td>
<td>0.06</td>
</tr>
<tr>
<td>Americanism difference score</td>
<td>-0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>Between-level$^g$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Therapist ethnicity$^h$</td>
<td>0.14</td>
<td>0.13</td>
</tr>
<tr>
<td>Therapist Hispanicism</td>
<td>-0.09</td>
<td>0.12</td>
</tr>
<tr>
<td>Therapist Americanism</td>
<td>-0.10</td>
<td>0.07</td>
</tr>
</tbody>
</table>

**Note.** Significant estimates and trends toward significance are underlined.

$^a n = 227$. $^b n = 224$. $^c$ Alcohol $= 1$, illicit drug $= 0$. $^d$ Mandated to treatment $= 1$, not mandated to treatment $= 0$. $^e$ Within-level coefficients are random coefficients. $^f$ Same birthplace between therapist and client $= 1$. $^g$ Born in Latin America $= 1$, born outside of Latin America $= 0$. $^h$ $p < .05$. $^i$ $p < .01$. $^{**} p < .001$. 

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icanism being inversely related to client substance use during treatment. The findings of this study generate many more questions for future research, in particular about the process of therapy with Spanish-speaking clients and how therapists’ level of acculturation may be related to treatment effects. Specifically, it is important that future researchers continue the search to identify the specific cultural characteristics displayed by highly Hispanicized and Americanized therapists that are conducive to better substance use outcomes in their clients.

Complicating this clinical picture is the finding that suggested that clients of therapists not born in Latin America decreased their substance use while in treatment, whereas for the clients of therapists born in Latin America the opposite was true. Clients born in Latin America may have overidentified with their Latin American-born therapist, which may have led to decreased inhibitions about using substances. It is also important to note that other factors, such as therapist competence or education, may have contributed to the current findings. In our current sample, we found that therapists born in the United States had higher education than therapists born in Latin America, which may explain in part the findings. It is also possible that for therapists displaying a higher level of competence in delivering the intervention their clients would do better. Together these findings suggest the existence of a complex process in therapy regarding the expression of cultural nuances, individual therapists’ cultural characteristics, and therapist skills. Thus, additional research is needed to disentangle all of these variables and provide a clearer picture of the effects of therapist cultural characteristics in this population.

Because this secondary study of therapists’ cultural characteristics only predicted the clients’ days of substance use, the lack of findings on Spanish-speaking clients’ participation in treatment should be discussed in the context of the larger Spanish MET clinical trial. In this trial, Spanish-speaking clients were equally retained in treatment in both conditions (Carroll et al., 2009). This fact is very encouraging for the field, which generally has documented low retention of Hispanics in treatment (Agosti, Nunes, & Ocepeck-Welikson, 1996; Brecht, Greenwell, & Anglin, 2005; White, Winn, & Young, 1998). Based on the findings of the Spanish MET trial regarding client participation, the findings of our secondary analysis are consistent with prior research on ethnic heterogeneity among Latinas and Latinos entering substance abuse treatment: Findings from a national database. Journal of Substance Abuse Treatment, 26, 277–284.

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