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Ethnic and Language Matching: Effects on Hispanics' Treatment Perceptions

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Ethnic and Language Matching:
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Ethnic and Language Matching:
Effects on Hispanics' Treatment Perceptions

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts in Psychology

by

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Abstract

Cultural adaptations to mental health treatment have been recommended to improve treatment outcomes in minorities, including Hispanics (Griner & Smith, 2006). One such adaptation includes matching the therapist to the client on culturally salient variables, such as spoken language or ethnic background. Yet, most investigations about the efficacy of matching have been correlational or have not examined language and ethnic match together (Cabassa, 2007). I investigated the effects of both ethnic and language matching on Hispanics' perceptions of psychological treatment. Participants were 100 Hispanic adults (36 men) randomly assigned to one of four conditions. In each condition, participants read a vignette describing a Hispanic man with depression symptoms who received services from a mental health clinician. Vignettes varied the clinician's language (Spanish or English) and ethnicity (Hispanic or non-Hispanic). Questions following the vignette asked participants to indicate the extent to which they felt the clinician was qualified, would be helpful, the treatment was appropriate, and treatment would consider important cultural factors. An exploratory factor analysis revealed these questions represented two factors: clinician professional qualifications and clinician consideration of culture into treatment. These factors represented dependent variables in subsequent analyses. Analyses of variance revealed a significant main effect of ethnic match on both dependent variables, with ethnic match leading to enhanced perceptions of the qualifications and cultural sensitivity of the clinician. A significant main effect of language match was found only for perceptions of the clinician's professional qualifications. Contrary to hypotheses, no significant interaction between matched ethnicity and language emerged. Results demonstrate language matched clinicians, regardless of ethnicity, were seen as more qualified than unmatched

clinicians, but only clinician ethnicity was related to a sense that cultural factors would play a role in treatment decisions.

Acknowledgements

Special thanks are extended to my thesis director, Dr. Ana Bridges, for her time and effort in contributing to my academic and professional growth during my educational experience at the University of Arkansas.

Also, special thanks to my committee members, faculty, staff, and fellow graduate students at the Department of Psychological Sciences for their support.

Dedication

This edition of *Hispanics' Treatment Perception* is dedicated to my parents for their continuous encouragement and .emotional support towards my academic, professional, and personal interests through my life.

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Introduction

Hispanics are a diverse ethnic group. Because of this heterogeneity, defining "Latino" and differentiating it from "Hispanic" can be challenging. The terms Hispanic and Latino are commonly used to refer to individuals from Central America, South America, and the Caribbean. However, a Hispanic is defined as an individual whose primary or secondary language is Spanish and background is related to Spain or Spanish origins (Puente & Ardila, 2000). On the other hand, a Latino is defined as an individual whose ancestry is Latin American, which includes countries to the south of the United States as well as Brazil (Puente & Puente, 2009).

The growth of the Hispanic population in the United States has been consistent and it is expected to continue. According to the Pew Hispanic Center, the Hispanic population in the U.S. increased from 9.1 million to 53 million between 1970 and 2012, which represents a six-fold increase (Brown, 2014). In 2000, the U.S. Census Bureau indicated that 12.5% of the U.S. population was Hispanic. In 2012, the Hispanic population was 17% of the U.S. population, representing a nearly 50% increase over just a dozen years (U.S. Census Bureau, 2013). The rapid growth of the Hispanic population likely explains the increase of the population of Spanish speakers in the United States. The population of people 5 years of age and older in the United States who speaks Spanish increased from 12% to 12.9% between 2005 and 2011 (U. S. Census Bureau, 2013).

Although representing increasing portions of the population, the Hispanic population has been minimally included in the psychology literature. For instance, a recent literature search in PsycInfo for the term "psychology" generated 1,353,593 results. The same literature search for "psychology" and "Latin*" or "Hispanic" generated 25,538 citations. Thus, the research literature in psychology about Hispanics represents only 0.019% of the total psychological

literature. Narrowing that same search to literature published in 2000 or later yielded 621,043 for "psychology" and 17,907 for "psychology" and "Latin*" or "Hispanic", or 0.029% of the literature. Approximately 70% of the literature on Hispanics in psychology has been generated in the past decade. Although it is encouraging that studies examining Hispanics are increasing, the percentage of studies remains well below that of their proportion in the population. Narrowing the gap between knowledge within psychology in general and more specific knowledge about Hispanics' issues related to psychological treatment seeking is therefore warranted.

Hispanics' Mental Health Usage

Despite being a growing minority group, Hispanics are less likely to use psychological services compared to Whites. For instance, Alegria et al. (2008) compared differences in access to psychological care for depression among ethnic groups. Participants were 2,800 African Americans, 1,435 Asians, 2,834 Whites, and 1,603 Hispanics. Access was defined as "at least one visit to a specialty mental health provider (e.g., psychiatrists, psychologists, counselors, social workers, or other mental health professionals seen in a mental health setting) or general medical provider (e.g., general practitioners, family doctors, nurses, occupational therapists, and other health professionals) for mental health care in the past year" (p. 1266). Results showed that among participants with a depressive disorder within the last year, 68.7% of Asians, 63.7 % of Hispanics, and 58.8% of African Americans, compared to 40.2% of Whites, did not receive treatment. Similarly, Marques et al. (2011) compared access to psychological services for eating disorders in a sample of 3,750 African Americans, 2,095 Asians, 5,692 Whites and 2,554 Hispanics. Compared to Whites (75.61%), Hispanics (42.83%) and Asians (38.70%) were significantly less likely ($p < .01$) to use mental health services for concerns related to bulimia

nervosa. Likewise, Hispanics (47.42%) and Asians (33.63%) were significantly less likely to access psychological services for any binge eating ($p < .001$) compared to Whites (75.98%). Also, Hispanics (61.65%), African Americans (62.21%), and Asians (63.22%) were significantly less likely to access psychological services for any disorder without a binge eating episode ($p < .001$) than Whites (75.80%) (Marques et al., 2011). These findings showed that Hispanics' accessibility to psychological services is lower than Whites, although their accessibility rates appear to be similar to those of other minority groups.

Several reasons have been suggested to explain Hispanics' lower access to psychological services compared to Whites across the research literature (Alegria et al., 2008; Bauer, Chen, & Alegria, 2010; Bridges, de Arellano, Rheingold, Danielson, & Silcott, 2010; Rogler & Cortes, 1993). According to Alegria et al. (2008), Hispanics have lower access to psychological services because of three reasons. First, clinicians might not be able to identify Hispanics' cultural descriptions of psychological symptoms (e.g., *ataque de nervios, susto*). Second, social stigma and financial constraints might hinder Hispanics' access to psychological services. Third, Hispanics might not perceive psychological symptoms (e.g., depression, anxiety) as distressful, which might decrease their likelihood of seeking psychological services. Likewise, Bridges et al. (2010) suggest that Hispanics' underutilization of psychological services might be due to lower rates of mental illness, preferences towards alternative sources of care rather than psychological services, and not identifying psychological symptoms as problematic. In a discussion about Hispanics' help seeking pathways, Rogler and Cortes (1993) emphasized that Hispanics' access to psychological services is determined by how systemic needs interact with linguistic and cultural needs. For instance, Hispanics might hesitate to access services that are not provided in Spanish. Systemic barriers might prevent access (e.g., transportation difficulties, financial

constraints) even though linguistic and culturally appropriate services might be available.

Ethnic Matching

It has been suggested that providing cultural adaptations to standard interventions can increase the likelihood that Hispanics obtain benefits from mental health treatment (Benish, Quintana, & Wampold, 2011; Griner & Smith, 2006), in large part because it may increase access and willingness to attend therapy. In a meta-analysis of 76 studies, Griner and Smith (2006) found that psychological interventions that included cultural adaptations were four times more effective than services without cultural specific interventions. Similarly, Benish et al.'s (2011) meta-analysis of 21 studies found that culturally adapted interventions were three times more effective than standard interventions. Some of the studies included in these meta-analyses achieved cultural adaptation by the use of ethnic matching between clients and therapists.

Ethnic matching consists of pairing a client with a mental health professional according to their common ethnicity, which is hypothesized to improve treatment outcomes for ethnic minority clients (Flicker, Waldron, Turner, Brody, & Hops, 2008; Givens, Houston, Van Voorhees, Ford, & Cooper, 2007; Gonzalez, Alegria, & Prihoda, 2005; Hu, Snowden, Jerrell, & Nguyen, 1991; Sue, 1977; Sue, Fujino, Li-tze Hu, Takeuchi, & Zane, 1991; Sue, McKinney, Allen, & Hall, 1974; Sue & Sundberg, 1996; Takeuchi, Sue, & Yeh, 1995; Torres, Cabassa, Zayas, & Alvarez-Sanchez, 2008; Ziguras, Klimidis, Lewis, & Stuart, 2003). A possible solution to increase Hispanics' access to psychological services might be to match a Hispanic client with a Hispanic clinician because Hispanic clients might feel better understood or more identified with a Hispanic clinician compared to clinicians from other ethnic groups.

Early studies of ethnic matching were focused on African Americans. Sue et al. (1974) investigated the delivery of mental health services to African American clients compared to

White clients, particularly focusing in the number of contact hours received among both ethnic groups. The sample included 11,904 White clients and 959 African American clients. As part of the intake and termination process, participants filled out inquiries relevant to the study. Results from Sue et al. (1974) indicated that the lack of ethnic matching was an important factor for African American clients' higher attrition rates compared to White clients presumably because ethnic differences hindered the development of trust and rapport between client and therapist. In a similar study, Flicker et al. (2008) investigated the effect of ethnic matching on 86 adolescent substance abusers and their families. Results indicated that Hispanic adolescents who were paired with an ethnically matched counselor had significantly higher treatment gains than Hispanic adolescents who were paired with a non-ethnically matched counselor. Furthermore, Hispanic adolescents in the ethnic matching condition had significantly less relapse than White adolescents (Flicker al., 2008). Overall, these findings showed that ethnic matching can produce beneficial outcomes when working with ethnic minority clients.

Ethnic matching and Spanish language. Because of the continuous increase of the Hispanic population in recent years (U. S. Census Bureau, 2013), it has been suggested that applying culturally sensitive interventions such as ethnic matching can address Hispanics' cultural needs and, ultimately, increase their use of psychological services (Benish et al. 2011; Griner & Smith, 2006). However, research on Hispanics' treatment seeking and outcomes tends to be limited to ethnic match, rather than language match (Cabassa, 2007). Even though ethnic matching is helpful, it has some limitations (Cabassa, 2007; Richardson & Molinaro, 1996; Sue, 1998). For example, it might not always be possible to assign Hispanic clinicians to Hispanic clients because the need for Hispanic clinicians is higher than their availability (Verdinelli & Biever, 2013). Other variables besides ethnicity, such as language, also need to be considered

when providing psychological services to Hispanics. Successful application of treatment adaptations for Hispanics might require integrating ethnic and language matching together. However, these two variables have not often been studied together, or one has been assumed to be indicative of the other (e.g., an ethnically matched therapist is presumed to speak the preferred language of the client).

Ethnic Matching Research

In recent years, results from some empirical investigations have supported that ethnic matching is related to positive treatment outcomes, increasing treatment utilization and decreasing attrition (Flicker et al., 2008; Gamst, Dana, Der-Karabetian, & Kramer, 2001; Sue et al., 1991). On the other hand, other investigations have found no effect of ethnic matching on treatment outcomes (Gamst et al., 2004). According to Meyer, Zane and Cho (2011), these conflicting findings are due to the use of both indirect measures of outcomes (e.g., number of sessions, dropout from therapy, client ratings) and direct measures of outcomes (e.g., symptoms improvement) to evaluate the effectiveness of ethnic matching to improve treatment outcomes. To clarify the inconsistency among these findings, Meyer et al. (2011) investigated the underlying processes that explain how ethnic matching works. A group of 171 Asian Americans listened to a recorded interaction between a therapist and a client regarding problems with stress. Participants also viewed pictures of the clinician, which varied in each condition by gender (e.g., male or female) and ethnicity (e.g., Asian or White). Structural equation modeling analyses revealed that participants in the ethnically matched condition (e.g., Asian therapist and Asian client) perceived greater experiential similarity compared to the condition with no ethnic matching. Experiential similarity was found to be strongly associated with therapist alliance and therapist credibility. This suggests that clients might perceive that the therapist is likely to share

similar experiences (e.g., culture, challenges, values) in ethnically matched conditions and thus, therapist alliance and therapist credibility increase, which improves the likelihood of favorable treatment outcomes. Alternatively, Meyer et al. (2011) suggest that in conditions where ethnic matching is not feasible, aiming to match clinicians and clients on variables like attitudes or values can also lead to improving therapist credibility and alliance.

Besides matching clients and therapists by ethnicity, there are other aspects that can contribute to a successful intervention, such as treatment adherence. Chapman and Schoenwald (2011) investigated the effects of ethnic similarity on caregiver-therapist pairs and positive mediation of those effects by therapy adherence at one and four year outcomes using multisystemic therapy. Participants were 1,979 youth and families treated by 429 therapists at 45 different clinical sites. Youth outcomes of interests were criminal activity, externalizing problems, internalizing problems, and changes in functioning. It was found that therapist adherence significantly predicted decreases in criminal activity, externalizing problems, and internalizing problems. On the other hand, ethnic similarity between caregiver and therapist predicted decreases in externalizing problems. Even though the reduction in externalizing problems was present regardless of ethnic similarity, therapists in ethnically similar pairs evidenced higher adherence to interventions aiming to help caregivers manage or reduce youth externalizing problems compared to their counterparts (Chapman & Schoenwald, 2011).

It is necessary to understand what ethnic minority clients expect when they receive culturally sensitive care because expectations regarding adequacy of treatment, cost, continuity, availability, and support can influence how culturally sensitive strategies (e.g., ethnic matching) are perceived and, ultimately, clients' therapeutic experiences. To that end, Meyer and Zane (2013) investigated how ethnicity and race affect clients' experiences of mental health services.

Participants were 102 clients (n = 57 Whites) who had received mental health treatment from outpatient mental health clinics. A series of self-report Likert measures were used to collect participants' views regarding cultural elements, access, general treatment satisfaction, quality of care, and satisfaction with services. Findings showed that ethnic minority clients consider cultural elements as significantly more important than their majority counterparts. Compared to White clients, ethnic minority clients considered that it was significantly more important to be ethnically matched with provider (p < .01) and that their provider be knowledgeable about prejudice and discrimination issues associated with their ethnic group (p < .01). Field and Caetano (2010) investigated the effects of delivering a brief motivational intervention using ethnic matching compared to a non-matched condition. Participants were 537 Hispanic patients at an urban trauma center who were receiving treatment for either alcohol-related injuries or alcohol-related problems. Hierarchical linear modeling was used to determine the effects of ethnic matching on the following drinking outcomes while controlling for acculturation and immigration status: volume per week, maximum amount, and frequency of five or more drinks per occasion. Results indicated that patients with ethnically matched therapist had a significant reduction of drinking outcomes at one year follow up compared to unmatched patients. Regarding acculturation and immigration status, ethnic matching was more beneficial for foreign-born Hispanics and less acculturated Hispanics than US-born and more acculturated patients.

Taken together, this literature review suggest that ethnic matching can contribute to positive treatment outcomes (Field & Caetano, 2010; Flicker et al., 2008; Gamst et al., 2001; Sue et al., 1991), but these benefits are not always present (Gamst et al., 2004). This discrepancy supports that ethnic matching is a complex process associated with cultural elements and

experience (Horst et al., 2012). For instance, Field and Caetano (2010) provide alternative mechanisms that might contribute to the benefits of ethnic matching such as cultural scripts (e.g., simpatia, familismo) and ethnic-specific channels of communication. Similarly, Meyer et al. (2011) recommend further exploring the roles of ethnic identity, attitudes, and values as possible mechanisms that contribute to the benefits (or lack thereof) of ethnic matching. Adherence to treatment has also been addressed as a factor that plays a role when ethnic similarity is considered (Chapman & Schoenwald, 2011).

Hispanics' Treatment Perception

In recent years, a group of studies has been conducted using vignette methodology to investigate U.S.-residing Hispanics' perceptions of depression as well as their attitudes towards depression treatments and treatment seeking (Cabassa, 2007; Cabassa, Lester, & Zayas, 2007; Cabassa & Zayas, 2007). Cabassa et al. (2007) investigated Hispanic immigrants' perceptions of depression and attitudes towards treatments, particularly how demographics, acculturation, clinical factors, and past use of treatments are related to Hispanics' attitudes and perceptions towards psychological treatment. Participants were 95 Hispanic immigrant clients, with an average age of 30 years and mainly of Mexican background. Participants received services at a primary health care clinic located in the Midwestern U.S. To assess perceptions of and attitudes towards depression, participants completed a structured interview which included a vignette adapted from the Mental Health Module of the 1996 General Social Survey that depicted a Hispanic client seeking treatment from a clinician for major depression concerns. Following written and auditory presentation of the vignette, participants were asked what they would call the situation (symptoms) described by the client and what was their cause. Results indicated that 55% of participants used the word depression (*depresión*) and depressed (*deprimído*) to describe

the cause of the situation in the vignette. In contrast, 45% of participants identified the symptoms as suicide or suicide ideation, being discouraged (*sin ánimo*), doubting oneself, or feeling insecure, rather than depression. Regarding causes, depression was attributed to interpersonal problems (58%), lack of encouragement (37%), economic strain (37%), physical illness (18%), bereavement (9%), and substance abuse (8%) (Cabassa et al., 2007). Results from showed that a significant minority of Hispanics lacked depression literacy. Even when depression was identified, the proposed causes varied considerably.

In 2007, Cabassa and Zayas explored Hispanic immigrants' perceptions of mental health disorders as well as their preferences for sources of care, particularly comparing formal sources of care (e.g., social worker, primary health care doctor, psychiatrist, psychologist) to informal sources of care (e.g., family member, friend). Ninety Hispanic immigrants (M_{age} = 30 years, *SD* = 10; 75% Mexicans, 75% women) completed structured face-to-face interviews. Data gathered included demographic information, attitudes towards depression, perceived barriers of care, and past service use for mental health problems. As part of the interview, participants listened to a recorded vignette depicting an individual with major depression, similar to that described in the previous paragraph. Cabassa and Zayas (2007) found that Hispanic immigrants tend to combine informal and formal sources of care by first relying on informal sources (e.g., family members) and then relying on formal sources of care (e.g., psychologist, social worker). Consistent with Cabassa et al. (2007), 41% of the participants indicated that depression was the concern that was depicted in the vignette. In sum, Hispanics are able to identify depression symptoms and prefer to combine informal and formal sources of care, although informal sources of care are preferred as a first choice to address emotional symptoms instead of psychological services. This may be true for non-Hispanics as well; however, findings suggest that working collaboratively with

informal sources of care can be helpful to increase Hispanics' access to psychological services.

Similar findings were obtained by Cabassa (2007) when exploring perceptions of depression and help seeking preferences in 56 Hispanic immigrant men ($M_{age} = 30$, $SD = 9.43$; 80% Mexicans). As in other studies, participants listened to a vignette depicting an individual with depression and answered a series of questions regarding their perceptions of the problem and their preferences for sources of care. Cabassa (2007) found that most participants attributed the symptoms shown in the vignette to interpersonal problems (48%), such as disruption of romantic or marital relationships. Consistent with Cabassa and Zayas (2007), participants preferred relying on family members as the first source of care (70%), followed by a combination of other formal and informal sources of care (Cabassa, 2007).

Overall, findings indicated that Hispanic immigrants' treatment seeking behavioral intentions for depression vary as a function of their views of depression, attitudes towards their doctors' interpersonal skills, and social norms related to professional care (Cabassa & Zayas, 2007). Furthermore, Hispanic immigrants perceived depression to be serious and to be related to social and interpersonal factors (Cabassa et al., 2007), which is consistent with the psychosocial and cultural factors that affect help seeking pathways (Rogler & Cortes, 1993). Non-professional coping strategies for depression included religious faith and supports from family members (Cabassa, 2007).

Limitations of Previous Studies

Research has allowed us to gain a better understanding of the relation between ethnic matching and positive treatment outcomes (Flicker et al., 2008; Givens et al., 2007; Gonzalez et al., 2005; Hu et al., 1991; Sue, 1977; Sue et al., 1991; Sue et al., 1974; Sue & Sundberg, 1996; Takeuchi et al., 1995; Ziguras, Klimidis, Lewis, & Stuart, 2003). However, lack of random

assignment and lack of independent variable manipulations have hindered the possibility of establishing cause and effect relations between ethnic matching and positive treatment outcomes. In addition, language matching and ethnic matching are not examined together in research literature about ethnic matching. However, use of vignette methodology, such as that by Cabassa (2007), may help close this gap in the research literature. Vignettes also allow for the isolation of ethnicity and language matching as separate, albeit related, variables that may impact treatment perceptions in Hispanic participants.

Purpose and Hypotheses

The purpose of this study was to test the effects of ethnic matching and language matching of therapist and client on Hispanics' perceptions of mental health treatment. It was hypothesized that there would be a significant main effect of language on treatment perceptions. Specifically, Spanish speaking clinicians would be perceived more positively than English speaking clinicians. Also, it was hypothesized that there would be a significant main effect of ethnicity on treatment perceptions. Specifically, Hispanic clinicians would be perceived more positively than non-Hispanic clinicians. A significant interaction between language and ethnicity was also predicted, such that ethnicity would matter more in the English speaking condition than in the Spanish speaking condition.

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Method

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Participants

Participants were 100 adults (62 women, 36 men, M_{age} = 37.02, SD_{age} = 13.73, age range: 82 years). Ninety five participants were recruited at a local *Cinco de Mayo* festival and 5 participants were recruited at a primary care clinic in the Northwest Arkansas region. Participants received \$5 for completing the questionnaires, which lasted approximately 5-10

minutes. Most participants (*n* = 63) were originally from Mexico and the rest were distributed across several Latin American countries (i.e., El Salvador, Puerto Rico, Guatemala, Chile, and Colombia) and the United States (Table 1).   There were 91 participants who described themselves as Latinos, including a higher number of Hispanics not born in the United States (*n* = 75) compared to foreign born Hispanics (*n* = 15).

Measures

   Demographics. A series of demographic variables were collected from participants, including (1) gender (male, female), (2) age (in years), (3) country of origin, (4) time living in the U.S. for those born abroad, (5) previously sought services for an emotional problem from a mental health specialist (yes or no), and (6) previous sought services for an emotional problem from a general medical provider (yes or no). In addition, participants were provided with a list of several methods of managing emotional problems (1 = *Deal with the situation yourself*, 2 = *Talk to a family member*, 3 = *Talk to a friend*, 4 = *Talk to a minister, priest, or rabbi*, 5 = *Talk to a medical doctor*, 6 = *Talk to a psychologist or counselor*, 7 = *Other-Specify*) and asked to rank the top three they prefer to manage their own mental health difficulties.

   Vignettes. One of four vignettes was provided to the participant. Each vignette described the case of Mr. Ramirez, a Latino individual with depression symptoms who received psychological services from a clinician. All vignettes were available in English and Spanish. The vignette consisted of two parts. The first part of the vignette was consistent across all four conditions, while the second part of the vignette changed according to the respective manipulation.   The first part of the vignette included the description of depression symptoms adapted from the Mental Health Module of the 1996 General Social Survey (as cited in Cabassa et al., 2007) because it provided an accurate and clear description of the depression symptoms

affecting the vignette character. This part of the vignette included the client's last name (Ramirez), time living in the United States (5 years), and that all his family remained in Latin America. It also described the symptoms Mr. Ramirez had been experiencing lately, symptoms consistent with a depressive disorder. The second part of the vignette described Mr. Ramirez seeking help for his symptoms for a clinician. This section of the vignette included the manipulations of language (Spanish or English) and ethnicity (Hispanic or non-Hispanic) of the clinician. For instance, in the Hispanic-Spanish vignette, Mr. Ramirez was matched with a Hispanic clinician (Dr. Suarez) who conducted the therapy session in Spanish, while in the non-Hispanic-English vignette, Mr. Ramirez was matched up with a Dr. Smith, a clinician who conducted sessions in English.

Perceptions of therapist. One question assessed participants' perceptions of the therapist's qualifications as described in the vignette (1 = *definitely qualified*, 2 = *somewhat qualified*, 3 = *don't know*, 4 = *probably not qualified*, 5 = *definitely not qualified*).

Cultural considerations. Two questions assessed how the client's (a) ethnicity and (b) language may have impacted the therapist's treatment plan. Both questions were assessed with a 5 point Likert scale, from 1 (*definitely because Mr. Ramirez is Hispanic/speaks Spanish)* to 5 (*definitely not because Mr. Ramirez is Hispanic/speaks Spanish*).

Acculturation. Acculturation was assessed with the *Acculturation Rating Scale for Mexican Americans II* (ARSMA-II; Cuellar, Arnold, & Maldonado, 1995), a 30-item measure that assesses cultural orientation between Latino and Anglo culture independently across three aspects of acculturation: language, ethnic identity, and ethnic interaction. Higher scores indicate a higher degree of acculturation to the American culture. The measure also includes two orthogonal subscales indicating acculturation to Mexican and American cultures. The ARSMA-

II has been found to have good internal consistency, strong construct validity, and strong concurrent validity (Cuellar et al., 1995). According to Cuellar et al. (1995), the Mexican Orientation Subscale (MOS) has an internal consistency of .88 while the Anglo Orientation Subscale (AOS) has an internal consistency of .83. For this investigation, the ARSMA II was modified so that it assessed acculturation for individuals from all Latin American countries rather than just Mexico. For example, in item 29 of the ARSMA II, instead of asking participants to rate the extent to which they identify as "Mexicans", participants were asked to rate the extent to which they identified as "Latino".

Procedure

Participants were recruited from a large *Cinco de Mayo* festival in the community and from the waiting room of a primary care clinic whose patients are primarily comprised of Hispanics. Participants were approached by a graduate research assistant and asked if they wanted to complete a 5-10 minute survey. If the person agreed to participate, they completed the informed consent and measures described above. Participants were randomly assigned to one of four vignettes: Spanish-Hispanic clinician ($n = 23$), Spanish-Non-Hispanic clinician ($n = 24$), Non-Spanish-Hispanic clinician ($n = 23$), and Non-Spanish-Non-Hispanic clinician ($n = 24$). No significant differences were found in acculturation, age, birth region, gender and years in the U.S. for participants across the diverse conditions (Table 2). A researcher was available in case participants had any questions or preferred to have items read aloud. After participants completed the survey, they were debriefed about the purpose of the investigation and received $5.00 cash for their participation.

Measures were available in English and Spanish. For measures that did not have Spanish versions (e.g., vignettes), the principal investigator and faculty supervisor, both of whom are

fully bilingual and bicultural, performed the translations. First, the principal investigator translated each form from English to Spanish. Then, the faculty supervisor performed a backward translation from Spanish to English. Any differences were discussed until consensus was reached.

Results

Preliminary Analyses

The five items that assessed anticipated therapeutic outcomes, perceptions of therapist, and client's ethnicity and language as relevant to treatment approach were subjected to a principal component analysis (PCA). Prior to performing the PCA, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Oklin value was .70, exceeding the recommended value of .60, and Bartlett's Test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix.

Principal component analysis with a direct oblimin rotation revealed the presence of two components with eigenvalues exceeding 1. Looking at the pattern of loadings between both components, items in component 1 refer to the clinician's professional qualifications (e.g., anticipated therapeutic outcomes, perceptions of therapist). The items on component 2 refer to cultural considerations in treatment (client's ethnicity and language as relevant to treatment approach). There was a moderate positive relationship between the two components ($r = .31$). Results of the PCA supported the use of professional qualifications and perception of cultural considerations in treatment as dependent variables. Therefore, items that loaded on each component were averaged to form two primary dependent variables: professional qualifications and cultural considerations. Pattern and structure matrixes for PCA are presented in Table 3.

Tests of Hypotheses

Two two-way between-groups analyses of variance (ANOVA) was conducted to investigate the effects of ethnic and language matching on participants' perceptions of (1) professional qualifications of therapist, and (2) cultural adaptations of treatment. Significance value was set at the .05 level.

Professional qualifications. Consistent with the hypotheses, results showed a significant main effect of language match on perceptions of clinician's professional qualifications, F (1, 90) = 13.49, p = .001; η^2_p = .13. Findings indicated that participants' perceptions of the clinician's professional qualifications were more positive when there was a language match (M = 1.73; SD = 0.14) compared to a non-language match (M = 2.46; SD = 0.14).

There was also a significant main effect of ethnic match on perceptions of clinician's professional qualifications; F (1, 90) = 5.64, p = .02; η^2_p = .06. Consistent with the hypothesis, participants' perceptions of the clinician's professional qualifications were more positive when there was an ethnic match (M = 1.86; SD = 0.14) compared to a non-ethnic match (M = 2.33; SD = 0.14). The interaction between ethnicity and language was not significant, F (1, 90) = .15 p = .70; η^2_p = .002. Results are displayed in Figure 1.

Cultural considerations. There was a significant main effect of ethnic matching on perceptions that the clinician considered the client's culture in treatment planning, F (1, 90) = 4.66, p = .03; η^2_p = .05. Results indicated that participants' perceptions of cultural considerations were more positive when there was an ethnic match (M = 2.26; SD = 0.19) compared to a non-ethnic match (M = 2.83; SD = 0.19). Contrary to the hypotheses, there was not a significant main effect of language match on considerations of culture in treatment planning, F (1, 90) = 1.29, p = .26; η^2_p = .14. Although participants' perceptions of cultural considerations in treatment were

more positive when there was a language match (M = 2.40; SD = 0.19) compared to a non-language match (M = 2.70; SD = 0.19), the difference was not statistically significant. Results indicated that there was not a significant interaction between ethnic and language match for considerations of culture, F (1, 90) = .44, p = .51; η^2_p = .005.

Help Seeking Preferences

Post-hoc analyses explored participants' help-seeking preferences when experiencing emotional distress. Results indicated that participants preferred informal sources of care compared to formal sources of care when dealing with emotional distress. The most frequent source of care selected was either dealing with the situation alone or talking to family members and friends. It was also found that psychological services and religious authorities (e.g., rabbi, minister, priest) were equally preferred in comparison with medical services (Table 4).

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Discussion

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The purpose of this investigation was to test the effects of ethnic and language matching on Hispanics' perceptions of psychological services, particularly cultural adaptation to treatment and clinician's professional qualifications. Participants read a vignette describing a Hispanic male with depression symptoms who received services from a clinician, and were randomly assigned by language (Spanish-English) and ethnicity (Hispanic-non-Hispanic) of clinician. Three predictions were made. First, Spanish speaking clinician would be perceived more positively than English speaking clinician. Second, Hispanic clinician would be perceived more positively than Non-Hispanic clinician. Lastly, ethnicity would be considered to be more important in the English speaking condition and less important in the Spanish speaking condition. As expected, Spanish speaking and Hispanic matching conditions were perceived significantly more positively than their counterparts. These findings support recommendations

towards developing culturally and linguistically adaptations to psychological services when working with Hispanics (Benish et al., 2011; Griner & Smith, 2006) because both adaptations, language matching and ethnic matching, were viewed favorably.

Regarding clinician's professional qualifications, findings suggest that both ethnic matching and language matching influence Hispanics' perceptions of professional qualifications more positively compared to their unmatched counterparts. This is consistent with interventions where matching a Spanish speaking client and a Spanish speaking clinician (Interian et al., 2008; Patterson et al., 2005) and matching a Hispanic client with a Hispanic clinician (Field & Caetano, 2010; Flicker et al., 2008) have resulted in successful treatment outcomes. Nevertheless, findings suggest that Hispanics consider knowing Spanish as more important in determining perceptions of professional qualifications than having a Hispanic clinician. A possible explanation for this trend is that unlike ethnicity, knowing Spanish is a skill that can be learned as part of educational and professional training. Perhaps, Spanish speaking clinicians are perceived as more professionally qualified because of the training required to learn how to communicate and apply interventions in Spanish (e.g., taking Spanish classes). For instance, results indicate that for non-Hispanic clinicians, perceptions were more positive in professional qualifications than treatment cultural considerations when knowing Spanish. Possibly, participants assumed that non-Hispanic clinicians who speak Spanish are less likely to include cultural considerations because the ethnicity mismatch (Hispanic client and non-Hispanic clinician), but are more professional qualified because of the professional training related to communicate in Spanish (e.g., number of years required to learn Spanish).

Regarding cultural considerations in treatment, only ethnic matching had a significant positive influence on perceptions of cultural treatment considerations. This trend is consistent

with interventions where pairing a Hispanic clinician with a Hispanic client has contributed to successful outcomes (Field & Caetano, 2010; Flicker et al., 2008), As predicted by ethnic matching (Sue, 1998), perhaps Hispanic clinician was perceived as more likely to understand client or be more familiar with client's cultural values (e.g., *familismo, respeto*) than non-Hispanic clinicians. Although language matching had a similar positive trend towards perceptions of considerations of culture in treatment compared to ethnic matching, but knowing Spanish was not as important to Hispanics. Findings suggest that Hispanics consider having a Hispanic clinician as more important in determining perceptions of cultural considerations than having a clinician who speaks Spanish. This discrepancy might occur because a culturally appropriate intervention can still be effectively applied to a Hispanic client even if the clinician does not speak Spanish with help of interpreters (True, 2000). On the other hand, Non-Hispanic clinician might be perceived as less culturally competent (e.g., lack of familiarity with Hispanic client's culture) because of the ethnicity mismatch, so being matched with a Hispanic clinician is more valued than knowing Spanish.

Regarding treatment preferences, results suggest that Hispanics tend to prefer informal sources of care to formal sources of care when managing emotional problems. This is consistent with trends seen in other ethnic groups. (Cabassa, 2007; Cabassa & Zayas, 2007). Given the barriers that result in Hispanics' lower utilization of psychological services compared to Whites, it is encouraging to corroborate that Hispanics eventually consider psychological services as potential source of help for emotional problems. Findings suggest that religious leaders and psychologists were seen as equally preferred even compared to medical professionals. However, these help seeking preferences are not consistent with findings from Cabassa, Zayas, and Hansen (2006) who found higher preferences towards medical professionals compared to psychological

professionals. Perhaps, the preference among different formal sources of care depends on external factors (e.g., costs, accessibility) rather than internal preferences (e.g., preferring to talk to an unfamiliar psychologist than the priest in the community). In addition, results support the high importance of family as a source of help when working with Hispanic clients because talking to a family member was the most preferred source of help. However, it is concerning that the second preferred source of help was not engaging in either formal or informal care.

There were several limitations to this investigation. First, data were collected using self-report measures from a vignette instead of actual interactions with clinicians, which hinders external validity of the findings. It remains to be explored if Hispanics' positive perceptions of clinician's professional qualifications and consideration of culture in treatment vary when ethnic and language matching are applied in a more realistic setting. In addition, almost 75% of our sample was from Mexico, which might ignore perceptions from Hispanics of other countries about cultural adaptations to treatment. More relevant cultural adaptations can be developed by also including more information from Hispanics of different countries. For instance, a cultural adaptation for a Hispanic client from Mexico might not apply for a Hispanic client from Ecuador (e.g., content of cuento therapy based on cultural values and expressions for each country might vary). Another limitation was that folk healing (e.g., *curanderos*), which can be relevant source of care for emotional problems in Hispanic culture, was not considered as formal or informal source of care. Hence, the extent of possible alternatives of help seeking alternatives is limited. Also, preference about sources of care was determined based on frequency of selection, but frequency does not indicate any rank order among selections of alternatives of care. Knowing rank order can provide a more accurate measure of preference when selecting source of care for emotional problems. For example, it was found that help from a religious leader and help from a

psychologist were equally selected, but knowing rank order of preferences can help determine which alternative is preferred. Finally, although main effects were statistically significant, the magnitude of the effects was relatively small according to Cohen's standards (Cohen, 1992), so results must be interpreted with caution.

Despite its limitations, findings from this investigation provided further evidence towards understanding how knowing Spanish and having a Hispanic clinician contributes to positive perceptions of professional qualifications and cultural considerations in treatment planning respectively. This can help to anticipate challenges regarding how a clinician is perceived when working with a Hispanic client (e.g., learning Spanish to improve perceptions of professional qualifications). In addition, results provided further evidence about Hispanics' preferences of help seeking alternatives when dealing with emotional problems. This can be helpful towards integrating informal and formal sources of care with psychological services because collaboration of sources of care has been recommended as a solution to increase Hispanics' utilization of psychological services and reduce attrition (Cabassa et al., 2006). For instance, providing workshops in the community about benefits of seeking psychological services might help to encourage help seeking behavior (e.g., seeing a psychologist) if needed. In conclusion, these findings support the benefits of language and ethnic matching in improving how Hispanics perceive clinician's professional qualifications and cultural consideration in treatment. Overall, results demonstrate that language matched clinicians are perceived as more professionally qualified than unmatched clinicians regardless of ethnicity. This suggests that knowing Spanish can be beneficial to improve perceptions of professional qualifications for non-Hispanic clinicians that work with Hispanic clients. Nevertheless, only clinician ethnicity is associated to cultural factors that impact treatment decisions. Given that the Hispanic population is expected

to maintain current trends of population growth, further exploring alternatives to improve

Hispanics' perceptions of psychological services, such as applying cultural and linguistic

adaptations, can be helpful to improve Hispanics' accessibility and outcomes of psychological

services. It is recommended that future investigations explore perceptions of professional

qualifications and treatment cultural considerations in more realistic settings rather than

vignettes.

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Table 1

Hispanic Sample by Country of Origin.

Country	N	%
Chile	2	2.2
Colombia	2	2.2
El Salvador	9	10.1
Guatemala	4	4.5
Mexico	63	70.8
Puerto Rico	4	4.5
United States	4	4.5
Venezuela	1	1.1

Note. Eleven participants did not answer question about their country of origin. $N = 100$.

Table 2

Pattern and Structure Matrix for PCA with Oblimin Rotation of Two Factor Solution

Item	Pattern Coefficients		Matrix Coefficient	
	Component 1	Component 2	Component 1	Component 2
Client will be helped with therapy.	**.89**	-.12	**.89**	.30
Client will agree with therapy.	**.88**	.03	**.88**	.42
Clinician's qualification to help client.	**.83**	.17	**.85**	.15
Ethnicity considered in treatment.	-.08	**.92**	.20	**.90**
Language considered in treatment.	.12	**.84**	.38	**.88**

Note. Major loadings for each item are bolded

Table 3

Means and Standard Deviations among Conditions

	AOS	HOS	Age	Years in the U.S.
Ethnic Match	*M* = 3.26 *SD* = .83	*M* = 4.02 *SD* = .69	*M* = 38.35 *SD* = 14.79	*M* = 13.71 *SD* = 9.74
No Ethnic Match	*M* = 3.46 *SD* = .95	*M* = 3.95 *SD* = .83	*M* = 35.67 *SD* = 12.54	*M* = 17.00 *SD* = 6.93
Language Match	*M* = 3.25 *SD* = .89	*M* = 4.01 *SD* = .75	*M* = 38.29 *SD* = 14.64	*M* = 14.35 *SD* = 8.34
No Language Match	*M* = 3.48 *SD* = .88	*M* = 3.96 *SD* = .77	*M* = 35.75 SD = 12.78	*M* = 15.97 *SD* = 9.14

Note. Means and standard deviations among ethnic and language matched conditions across acculturation (Anglo Orientation Scale and Hispanic Orientation Scale), age (in years), and years in the United States ($p > .05$).

Figure 1. Results of a two-way Analysis of Variance to Investigate the Effects of Ethnic and Language Matching on Professional Qualifications of Clinician and Cultural Considerations of Treatment.
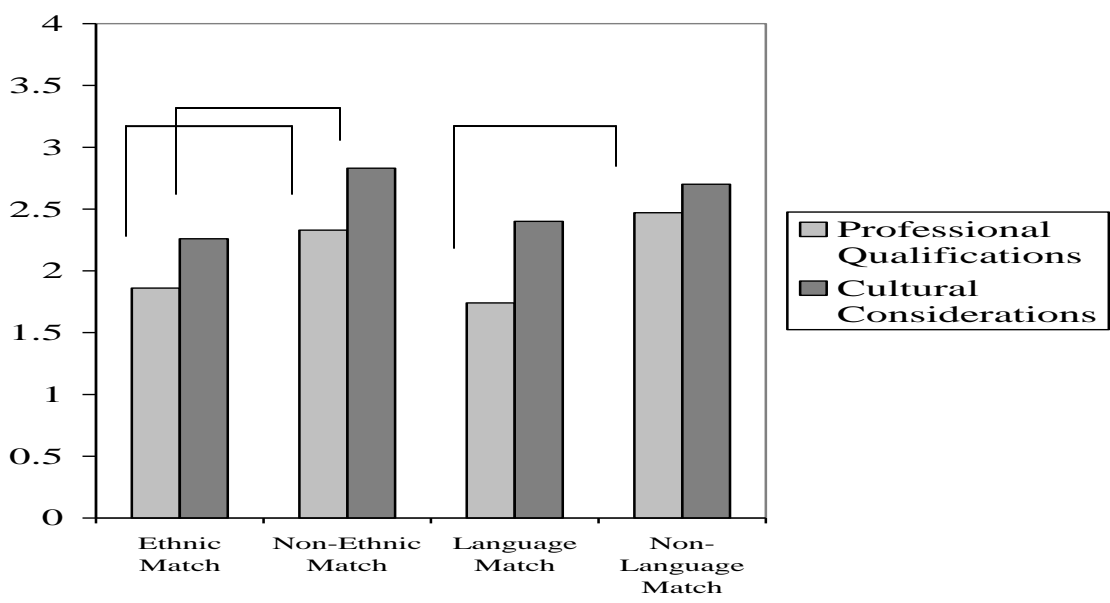

Figure 1. Means of perceptions of professional qualifications and treatment cultural considerations by ethnic and language matching of clinician at *p* =.05.

Table 4

Hispanics' Help Seeking Preferences for Emotional Care

Sources of Emotional Care	Women	Men	Total
No care:			
Deal with situation yourself	30 (51%)	23 (66%)	53(54%)
Informal care:			
Family member	41 (70%)	27 (77%)	68 (69%)
Friend	32 (54%)	17 (49%)	49 (50%)
Formal care:			
Minister, priest, or rabbi	19 (32%)	16 (46%)	35 (36%)
Medical doctor	16 (27%)	6 (17%)	24 (24%)
Psychologist or counselor	25 (42%)	10 (29%)	35 (36%)

Appendix A

Research Support and Sponsored Programs
Institutional Review Board

March 21, 2011

MEMORANDUM

TO: Carlos Orjeda
                Ana Bridges

FROM: Ro Windwalker
                IRB Coordinator

RE: New Protocol Approval

IRB Protocol #:   11-03-541

Protocol Title: *Treatment Perceptions in Hispanics*

Review Type: ☒ EXEMPT   ☐ EXPEDITED   ☐ FULL IRB

Approved Project Period: Start Date: 03/21/2011 Expiration Date: 03/20/2012

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Compliance website (http://www.uark.edu/admin/rsspinfo/compliance/index.html). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval.   Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

If you wish to make *any* modifications in the approved protocol, you must seek approval *prior to* implementing those changes.   All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 120 Ozark Hall, 5-2208, or irb@uark.edu.

Appendix B

UNIVERSITY OF ARKANSAS

February 29, 2012

MEMORANDUM

TO: Carlos Ojeda
                        Ana Bridges

FROM: Ro Windwalker
                        IRB Coordinator

RE: PROJECT CONTINUATION

IRB Protocol #:   11-03-541

Protocol Title: *Treatment Perceptions in Hispanics*

Review Type: ☒ EXEMPT ☐ EXPEDITED ☐ FULL IRB

Previous Approval Period: Start Date: 03/21/2011 Expiration Date: 03/20/2012

New Expiration Date: 03/20/2013

Your request to extend the referenced protocol has been approved by the IRB. If at the end of this period you wish to continue the project, you must submit a request using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. Failure to obtain approval for a continuation on or prior to this new expiration date will result in termination of the protocol and you will be required to submit a new protocol to the IRB before continuing the project. Data collected past the protocol expiration date may need to be eliminated from the dataset should you wish to publish. Only data collected under a currently approved protocol can be certified by the IRB for any purpose.

This protocol has been approved for 100 total participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.