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THE ROLE OF VALUES ENCULTURATION, MENTAL HEALTH STIGMA,
& ATTITUDES ABOUT TREATMENT ON HELP-SEEKING
INTENT AMONG LATINOS

by

Natasha S. Najar

A Dissertation submitted to the Faculty of the Graduate School,
Marquette University,
in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy.

Milwaukee, Wisconsin

May 2019

ABSTRACT
THE ROLE OF VALUES ENCULTURATION, MENTAL HEALTH STIGMA,
& ATTITUDES ABOUT TREATMENT ON HELP-SEEKING
INTENT AMONG LATINOS

Natasha S. Najar

Marquette University, 2019

      The current study examined how attitudes about psychological treatment and stigma toward mental illness influence the relationship between Latino cultural values (i.e., values enculturation) and their intention to seek psychological services. Using a sample of 220 Latino adults, multiple mediation analyses examined if the relationship between enculturation, operationalized as cultural pride and familismo; and intent to seek help from mental health provider was mediated by Latinos' attitudes about psychological treatment (i.e., stigma tolerance and belief in psychologists' expertness) and stigma toward mental illness. Further, it was hypothesized that depression would moderate the mediational pathway. The major findings indicated the Latino value of cultural pride is indirectly related to help-seeking intentions through Latinos' beliefs in psychologist' expertise. Although expertness did mediate the relationship between values enculturation and help-seeking intent, the addition of depression as a moderator was not significant — the finding that expertness mediated the relationship between Latino cultural pride and intent highlights the importance of trust and confidence in psychologists as a significant predictor of help-seeking intentions. Further interpretation of these findings, theoretical implications, and future directions are discussed.

ACKNOWLEDGMENTS

I want to thank my dissertation committee members, Drs. Ed de St. Aubin and Jim Hoelzle, for being so supportive and encouraging, and for all your valuable feedback on this project. Dr. Hoelzle, I truly appreciate your willingness to join my committee, you have been a great addition. I would also like to especially thank my dissertation chair and advisor, Dr. Lucas Torres for all his guidance, patience, and support over the years. I would also like to give a special thank you to Dr. Alyson Gerdes, for being such a great cheerleader and helping to make sure that I completed. Your support and encouragement these last two years has meant a lot to me. Marquette's graduate students are fortunate to have such a dedicated and encouraging DCT!

To my "tribe" of amazing friends – Sometimes you get lucky and the right people come into your life, resulting in life-long friendships. Marsha, Jenny, Erika, Angie, Gaby, Ashley, and Omaira – Thank you for always being there, I don't know how I would have made it through this very demanding and difficult journey without you. Even when we were miles apart, you were never more than a call, text, or FaceTime visit away. I am inspired by my tribe of amazing soul sisters and I love you all dearly for your endless support and friendship! To new friends, I've been fortunate enough to add to my clan - James, Kaddy, Emily, Dalya, and Tamara. Thank you for all of your support, for laughter, adventures, and happy tears. You have all been a treasure to know, and I am grateful that my journey to the southwest resulted in our friendship!

These past years in graduate school have been some of the best and hardest years of my life. Through it all, the good, the bad, and the ugly, I've had the unyielding support and love of my family – Mom, Dad, and Gogo. Guys, I could not have done this without you! No matter how near or far, I could always count on you three to be at my side (literally and figuratively). Thank you for always having my back, for always believing in me, for being my light during my darkest moments. I will never be able to thank the three of you enough for everything you have done. Thank you for never letting me give up, for reminding me of my own strength when I didn't think I could go on, for coming to visit me when I needed support, and for always making sure I had a fridge full of food. You have always been my biggest cheerleaders supporting and nudging me as I made it to the finish line. Thank you, and I love you forever.

Finally, I would like to thank all my mentors and colleagues at the Center for Behavioral Medicine, Southern Arizona VA, and La Frontera, especially Drs. Kim Skerven, Neal, Jenne Breslin, Heather Brister, Michelle Dorsey, Sabina Hitt, and Nadine Cole, who have all been very supportive in seeing this project completed. I have deeply valued your guidance and mentorship, which has played a critical part in my professional development- Thank you!

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CHAPTER I

INTRODUCTION

Latinos have become one of the largest and fastest growing populations in the

United States. Recent population projections have indicated that by 2060, the number of

Latinos in the United States will reach 129 million, or 31% of the population (U.S.

Census Bureau, 2014). Despite the growing population, disparities in access to mental

health treatment and quality of services have consistently been documented within Latino

communities (Cabassa, 2013; Smedley, Stith, & Nelson, 2003; U.S. Department of

Health and Human Services, 2001). For example, only one in 11 Latinos with a mental

health disorder receive services from a mental health specialist (U.S. Department of

Health and Human Services, 2001). Instead, Latinos are more likely to seek help from

primary care physicians than mental health providers (Bridges, Andrews, & Deen, 2012).

The low utilization rates are not because of a lesser need for services. On the contrary,

common mental health disorders experienced by Latinos include major depression,

generalized anxiety disorder, substance use, and posttraumatic stress disorder (National

Alliance of Mental Illness, 2017).

Latinos have historically underutilized services in the United States compared to

non-Latino Whites (Cabassa, Zayas, & Hansen, 2006). For example, Wells, Klap, Koike,

and Sherbourne (2001) found that among adults with a mental health disorder, 38% of

non-Latino Whites received services whereas only 22% of Latinos received mental health

care. Moreover, Latinos with a diagnosis of depression were reported to utilize mental

health services less frequently than their non-Latino White counterparts, even when they

had access to health insurance (Ojeda & McGuire, 2006). The lack of participation in

treatment for mental health problems, compounded with the Latino population's growing need for mental health services, underscores the importance of understanding factors contributing to their intention to seek psychological help.

Numerous studies have explored the different types of barriers that contribute to the underutilization of mental health services among Latinos (Barrio et al., 2008; Cabassa, Siantz, Nicasio, Guarnaccia, & Lewis-Fernández, 2014; Uebelacker et al., 2010). Among the different types of barriers, cultural factors such as acculturation, enculturation, stigma, and cultural values have been explored within help-seeking literature among ethnic minorities (Leong, Kim, & Gupta, 2011; Yoon et al., 2013). Within the cultural determinants of the help-seeking theoretical model (Saint Arnault, 2009), culture is defined as a multidimensional construct that affects our beliefs, values, and rules about social behavior and practice. According to this theory, the help-seeking process begins at the first sign or perception of emotional distress. Further, the method of identifying, labeling (emotional distress), interpreting meaning, and finding a solution all occurs through a cultural context. It is important to understand the meaningful influence that culture has on the beliefs and perceptions that Latinos' may have concerning mental illness, mental health services, and help-seeking attitudes (Guarnaccia, Martinez, & Acosta, 2005).

It is reasonable to assume that culture not only influences the recognition and attribution of one's problems but also affects one's attitudes and beliefs about mental health. Help-seeking attitudes and beliefs about mental health have been frequently investigated in relation to treatment utilization (Bermudez, Kirkpatrick, Hecker, & Torres-Robles, 2010; Fripp & Carlson, 2017; Rojas-Vilches, Negy, & Reig-Ferrer, 2011;

Vogel, Shechtman, & Wade, 2010). Much of this research has been theoretically based on Ajzen's (1991; 2012) theory of planned behavior (TPB), which suggests that one's actual behavior can be predicted by their intention to act on a given behavior. The theory also postulates that a person's intention is influenced by their attitude toward a given behavior, perceived control of the behavior, and the subjective normative beliefs about the given behavior. While the TPB does not explicitly identify how cultural context influences the help-seeking model, recent studies have adopted the TPB and modified this model to incorporate the impact of culture with different ethnic minority populations (Kim & Park, 2009; Mesidor & Sly, 2014; Mojaverian, Hashimoto, & Kim, 2012). Since attitudes and beliefs about mental illness and treatment are theorized to be influenced by cultural norms, examining the cultural context is essential to the understanding of attitude formation (Chang, Natsuaki, & Chen, 2013; Kouyoumdjian, Zamboanga, & Hansen, 2003). Furthermore, the examination of Latino cultural variables such as cultural values might help researchers better understand how cultural shaping of attitudes and beliefs impacts help-seeking intentions (Hwang, Myers, Abe-Kim, & Ting, 2008).

The sociocultural variable of acculturation has been often associated with psychological help-seeking behaviors. Psychological help-seeking behaviors are defined as actively engaging in the planning or actual conduct of seeking mental health assistance from a mental health provider (such as a counselor, psychologist, or psychiatrist) for a given problem (Cramer, 1999; Topkaya, 2015). Acculturation in the present study refers to the process of adapting to the cultural norms of the majority culture that Latinos in the United States experience (Yoon et al., 2013). Traditionally, acculturation refers to changes in one's cultural values, behaviors, and cognitions that occur when in continuous

contact with the dominant host culture (e.g. U.S. mainstream; Sun, Hoyt, Brockberg, Lam, & Tiwari, 2016). Similar to the construct of acculturation is the second adaption process called enculturation, which is defined as the process of maintaining or (re) learning the cultural norms of one's culture of origin (Alamilla, Kim, & Lam, 2010; Kim, 2007). Both acculturation and enculturation have been identified as significant predictors of help-seeking attitudes among ethnic minorities (Sun et al., 2016).

While empirical evidence for the relationship between acculturation/enculturation and psychological help-seeking attitudes and behaviors is mixed within Latino research, there are important theoretical arguments for further investigation of the role of values enculturation on mental health outcomes (Kuo, Bau, & Lowinger, 2015; Miville & Constantine, 2006; Ramos-Sanchez & Atkinson, 2009). One argument is that enculturation has largely been understudied and rarely explored separately from acculturation concerning mental health attitudes and behaviors. Second, the majority of empirical studies examining acculturation and enculturation have used instruments designed to measure behavioral indicators of cultural adaptation or retention (Kim & Abreu, 2001). These measures fail to capture changes in cultural values and norms that might be more informative, given that values represent an individual's worldview and patterns of social interactions (Kim et al., 2009; Martin, 1992). For example, adherence to traditional Latino cultural values (i.e., values enculturation) has been believed to conflict with values of the mainstream culture that promote counseling theories and practices (Abreu, Consoli, & Cypers, 2004). It is unclear whether Latinos with higher enculturated views are more likely to express negative attitudes and less likely to seek psychological help, or if greater enculturation might facilitate positive attitudes toward psychological

help-seeking. As such, one of the aims of the current study was to explore whether values enculturation, as measured by adherence to Latino cultural values of *familismo* and cultural pride, would be a better predictor of attitudes toward mental illness and treatment than the traditional behavioral measures of acculturation and enculturation. A second aim of the study was to test whether psychological help-seeking attitudes and negative beliefs about mental illness would mediate the relationship between Latino cultural values and help-seeking intention. By gaining a better understanding of these relationships, researchers and clinicians can work to increase the utilization of mental health services in the Latino community.

CHAPTER II

LITERATURE REVIEW

Help-Seeking Attitudes and Intentions

Exploring Latinos' help-seeking attitudes and stigmas about mental illness may be one way to gain a better understanding of treatment utilization. Ajzen (1991) has asserted that the more one intends to perform a behavior, the greater the likelihood that one will perform the given behavior. Furthermore, the more favorable one's attitudes are toward a given behavior or activity, the more likely they are to carry out a given behavior or activity (Ajzen, 1991; 2012). Ajzen's (1991) TPB offers a heuristic framework to understand the role of negative or positive help-seeking attitudes and intentions in the process of seeking psychological help. In particular, the TPB suggests that a person's attitude toward a given behavior is a critical predictor of intention to engage in the behavior (Ajzen, 2012). This theory also identifies how constructs of normative beliefs and perceived behavioral control also influence one's intention to engage in a behavior. The TPB identifies intentions as an essential factor in performing a given behavior, as intentions "capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, to perform the behavior" (Ajzen, 1991, p. 181).

Another important component of this model in predicting behavior is the construct of subjective norms, which refers to an individual's perception of others' beliefs about whether or not he or she should perform a given behavior (Ajzen, 1991). Based on this definition, individuals are motivated to engage in behaviors that are aligned with the expectations of others (Ajzen & Fishbein, 1972). This reference group can be the

individual's family, friends, or any other group in their environment they consider important. Family members, friends, and close community members have all been documented as having a significant impact on the mental health of Latinos (Mulvaney-Day Alegria, & Sribney, 2007; Vega, Kolody, & Valle, 1987) as well as playing a critical role in influencing the types of formal or informal treatments they seek (Guarnaccia & Parra, 1996). Latino culture is a collectivist culture that places a strong emphasis on the beliefs and needs of families and communities and encourages people to do what is in the best interest the group rather than the individual (Hoffman & Hinton, 2014). It is reasonable to suggest that subjective norms may have an important influence on Latinos' attitudes and decisions to seek mental health services.

There is a great deal of empirical support on using the TPB to understand both health and mental health related behaviors. Within the empirical literature among Latinos, the TPB framework has been used to gain a better understanding of behaviors such as substance abuse (Pinedo, Zemore, & Rogers, 2018), health beliefs and care-seeking behaviors (Rogers, 2010), and adherence to HIV testing and treatment (Vissman, Hergenrather, Rojas, Langdon, Wilkin, & Rhodes, 2011). Within the context of psychological help-seeking, previous research has shown that help-seeking attitudes reliably predict help-seeking intentions, which can predict later help-seeking behaviors (Deane, Skogstad, & Williams, 1999). Specifically, among studies that have examined Latinos' help-seeking attitudes and intentions, very few have investigated the relationship between attitudes, stigma, and help-seeking intentions. For example, Kuo et al. (2015) examined a culturally modified model of the theory of reasoned action to explain psychological help-seeking intentions among a sample of foreign-born Latino adults

living in Canada using path analysis. Kuo et al. found empirical support of both positive help-seeking attitudes and subjective norms influencing greater help-seeking intentions among Latinos in their sample. Subjective norms were operationalized as the attitudes toward psychological help-seeking among participants' important referents (e.g., spouse, parents, extended family, friends, and others). These findings lend support to the positive association between attitudes and help-seeking intentions. Moreover, the addition of sociocultural variables such as acculturation, enculturation, and stigma improved the theory of reasoned action model in explaining help-seeking intentions among foreign-born Latinos (Kuo et al., 2015).

Latinos' attitudes toward seeking mental health services are influenced by the perceived consequences and beliefs that they hold regarding psychological help-seeking (Kuo et al., 2015). Therefore, if a person believes that seeking mental health treatment is a sign of weakness or that therapy would not help them, then their personal attitude toward seeking help may have more weight than the consequences of not receiving treatment in their overall decision to engage in treatment. Moreover, based on the TPB framework, it is likely that Latinos' intention to pursue mental health treatment are largely influenced by their cultural attitudes and beliefs about mental illness and seeking psychological treatment.

While definitions of attitudes and help-seeking attitudes vary across empirical studies, the term *attitude* refers to an individual's positive or negative appraisal of a specific behavior (Mesidor & Sly, 2014). Help-seeking attitudes in the present study used the conceptualization by Fisher and Turner (1970) that defined help-seeking attitudes as a multidimensional construct that reflected (1) recognition of need for psychological help,

(2) tolerance for stigma associated with seeking mental health treatment, (3) willingness to disclose one's problems, and (4) confidence in mental health practitioners. In particular, the present study sought to investigate the specific help-seeking constructs of tolerance for stigma associated with seeking mental health treatment (i.e., stigma tolerance) and confidence in the merits of mental health practitioners (i.e., expertness).

Attitudes of help-seeking measurements. The Attitudes Towards Seeking Professional Psychological Help (ATSPPH; Fisher & Turner, 1970) has been the most frequently utilized self-report instrument of help-seeking attitudes. The 29-item instrument yields a total score of help-seeking attitudes, in addition to four separate subscales: Stigma Tolerance, Interpersonal Openness, Confidence in Mental Health Practitioner, and Recognition of Need for Psychotherapeutic Help. Despite being the most well-known and utilized measure on attitudes toward seeking psychological help, both the original ATSPPH and its brief 10-item short form scale (Fischer & Farina, 1995) have been criticized for several psychometric limitations (Ægisdóttir & Gerstein, 2009; Mackenzie, Knox, Gekoski, & Macaulay, 2004). These limitations include but are not limited to concerns with its content validity. For example, a number of items were found to reflect outdated terms and gender-biased language. The use of interchangeable terms for mental health professions (i.e., psychiatrist, psychologist, clergy, mental health counsellor) was believed to limit its internal consistency, and items were generated exclusively by a panel of mental health providers. Another noteworthy criticism of this scale relates to its construct validity. There has been much debate about the ATSPPH's factorial validity, in addition to noting items that did not measure the construct of help-

seeking attitudes but rather related personality characteristics. Several newer scales of help-seeking have been developed based on the limitations of the ATSPPH.

One of the alternative instruments designed to measure an individual's attitude toward psychologists and their services is the Beliefs About Psychological Services (BAPS; Ægisdóttir & Gerstein, 2009). The BAPS is a reliable and valid 18-item instrument that was developed to address the shortcomings of the ATSPPH. The original item pool of the ATSPPH was reviewed while generating items for the BAPS. Utilizing a panel comprised of psychologist and college students, 14 statements from the original ATSPPH measure were selected, in addition to adding new items. Statements from the ATSPPH that were selected referred to characteristics of mental health professionals and psychological treatment; the wording of several items was changed in order to reflect current language, gender neutrality, and to refer to psychologists only (Ægisdóttir & Gerstein, 2009). The authors of the BAPS conducted three independent studies examining the factorial stability of the scale and concluded that a three-factor solution was the best fit for the BAPS. These three subscales include intent, stigma tolerance, and expertness.

Several advantages have been noted in the use of the BAPS over other attitudes of help-seeking instruments; for example, the BAPS measures multidimensional aspects of attitudes toward seeking psychological help, rather than concentrating only on the general construct of *attitude*. Second, the BAPS' structure is based on the TPB (Ajzen, 1985) and the authors reported that each of the three subscales correspond to the key concepts of the TPB: attitude, social norms, and intentions of behavior. The first subscale, the expertness subscale, measures a person's perceptions of the expertise of a psychologist and

corresponds to the *attitude* concept of the TPB. The second subscale is stigma tolerance, which corresponds to the *social norms* factor of the TPB and measures a person's perceptions of the societal barriers and negative views toward seeking psychological treatment. Finally, the intent subscale represents the *intention* concept of the TPB and measures one's intentions or willingness to seek psychological help if needed (Ægisdóttir & Gerstein, 2009).

The BAPS scale (Ægisdóttir & Gerstein, 2009) was utilized in the current study to examine attitudes toward psychological services. It was important to find an instrument of help-seeking that did not obscure the constructs of attitudes of help-seeking with the construct of intentions. The BAPS allows the researcher to measure attitudes toward help-seeking (e.g., stigma tolerance and expertness subscales) separately from intentions (e.g., intent subscale) through the use of subscales. Ægisdóttir and Gerstein (2009) recommended that researchers use the three subscales instead of a total score, as the total score reflects not only help-seeking attitudes and beliefs but also their willingness to seek treatment, which is arguably a different behavioral construct. As such, the stigma tolerance and expertness subscales were used in the current study to represent different attitudes of psychological help-seeking.

Cultural Impact on Help-Seeking among Latinos

Researchers have suggested that culture plays a critical role in seeking help for psychological problems among ethnic minorities (Hwang et al., 2008; Snowden & Yamada, 2005). *Culture* is broadly defined as the set of attitudes, values, beliefs, and behaviors that are collectively shared among individuals within culturally related ethnic groups (Hwang et al., 2008). However, this definition does not imply that an individual

must encompass all the cultural values and beliefs within their ethnicity. Instead, it provides a guide of potential cultural factors that are related to specific ethnic groups (Lopez & Guarnaccia, 2000). It is within reason to assume that culture influences several aspects of help-seeking behaviors, including the recognition and attribution of the problem, expression of distress, coping styles, and deciding where to seek treatment and from whom (Hwang et al., 2008)

The Latino culture has been largely described as collectivistic one that emphasizes interdependence within one's social network, strong traditional gender roles, respect for others and authority (*respeto*), and the importance of one's family (de las Fuentes, 2003; Romero, 2000). It has been postulated that these collectivist cultural values may conflict with Western-based therapy practices that emphasize individualism, assertiveness, and emotional expression; thus, Latinos may perceive seeking therapy as culturally incongruent with their values, leading to negative attitudes and low help-seeking intentions (Bledsoe, 2008; Kim, 2007; Leong, Wagner, & Tata, 1995; Miville & Constantine, 2006).

The Latino value of *familismo* is an essential value among Latino individuals and refers to the importance of strong family loyalty, closeness, and contributing to the wellbeing of the nuclear and extended family members (Caballero, 2011; Sabogal, Marin, Otero-Sabogal, Marin, & Perez-Stable, 1987). *Familismo* is a multidimensional construct that encompasses structural (e.g., proximity to family), attitudinal (i.e., perceived family support; familial obligation to the needs of family members; and family as referents when making decisions) and behavioral components (Sabogal et al., 1987, Hernandez & Bamaca-Collbert, 2016).

It has been theorized that the value of *familismo* is relevant to help-seeking intentions. However, the specific role of *familismo* on Latinos' use of mental health services is poorly understood. Empirical evidence suggests that *familismo* serves as a protective factor and as an important source of support during crisis and emotional distress (Miville & Constantine, 2006; Valdivieso-Mora, Peet, Garnier-Villarreal, Salazar-Villanea, & Johnson, 2016). Research also suggests that in times of psychological or emotional distress, Latinos are more likely to seek their families for advice or counsel on important life decisions (Cabello, 2011). As such, Latinos' intentions and behaviors to seek help from mental health professions may be thwarted by their reliance on or preference to confide in family or friends for personal or emotional problems (Cabassa, 2007; Chang et al., 2013). In this regard, *familismo* may act as a barrier to mental health treatment, especially if the family believes that mental health issues should remain private and dealt with within the family. For example, the Latino family is viewed as being highly interdependent. When a member of a family is experiencing a problem, it is common for Latinos to keep it to themselves or seek support from members of their family or close social network (Romero, 2000). This contrasts the psychological openness and self-disclosure involved in therapy, which refers to one's ability to discuss personal problems openly and willingly to a therapist. For Latinos, this type of disclosure may be perceived as being culturally incongruent with the belief that one keeps personal matters to themselves and within the family (de las Fuentes, 2003) or that one needs to remain in control (*controlarse*) and stay strong during stressful times (*aguantarse*; Romero, 2000).

Cultural pride is another critical cultural value that has not been extensively researched with regards to help-seeking attitudes and behaviors. Cultural pride is synonymous with ethnic pride, which refers to the positive affection, self-respect, and high respect for one's affiliation with an ethnic or cultural heritage or group (Castro, Stein, & Bentler, 2009). In other words, adherence to the value of cultural pride signifies one's positive emotions and attitudes regarding their affiliation with that cultural identity.

Prior research on the relationship between cultural pride and mental health outcomes has been minimal, especially among Latino populations. For example, in a study with 561 Mexican American women, a greater sense of pride and connectedness with one's cultural background was associated with a higher level of family support (Dinh, Castro, Tein, & Kim, 2009). Moreover, Dinh and collegues (2009) found that Mexican American women with higher levels of ethnic pride reported higher levels of family support, which in turn predicted lower levels of mental health problems. In other words, family support significantly mediated the relationship of ethnic pride to mental health problems, underscoring the importance of family among Mexican American women. In another study with Latino adolescents, greater ethnic pride was associated with lower levels of cigarette and alcohol use among Latina girls (Castro et al., 2009). In a study with Taiwanese adolescents, a closely related construct of collective self-esteem, which refers to individuals' attitudes about the social groups to which they belong (Omizo, Kim, & Abel, 2008), found that higher levels of collective self-esteem was significantly predictive of less favorable attitudes toward help-seeking (Yeh, 2002).

Little is known about the effects of cultural pride on help-seeking attitudes or intentions to seek mental health, and there has been no research to date that has examined

the relationship between adherence to cultural pride and help-seeking intentions among Latinos. Understanding how these and other cultural values relate to Latinos' help-seeking attitudes and behaviors may help to disentangle the complex relationship between culture variables and mental health behaviors. Therefore, the present study examined the cultural values of cultural pride in addition to *familismo*.

Acculturation

An emerging body of research has explored the role of culture on attitudes toward seeking psychological help. Acculturation refers to the psychological process and adaptions that occur when an individual is continually exposed to a new dominant host culture. During the process, an individual experiences changes in their behaviors, cultural values, and cognitions as a result of their continuous interactions with the host culture (Graves, 1967; Kim & Abreu, 2001; Redfield, Linton, & Herskovitz, 1937). Acculturation had originally been theorized as a unilinear process where greater adherence to the new host culture resulted in a decrease in adherence to one's culture of origin (LaFromboise, Coleman, & Gerton, 1993; Miller, Yang, Hui, Choi, & Lim, 2011). This unilinear model of acculturation implied that individuals would eventually replace their cultural values, behaviors, and traditions associated with their culture of origin with the characteristics and values of the host culture. This theory had been scrutinized by multicultural researchers, as it incorrectly suggested that assimilation to the host culture is the expected outcome and that a person cannot orient to more than one culture.

Recent theories of acculturation have proposed a bilinear model in which the process of adaptation is comprised of two orthogonal processes: adaption to the cultural norms of the new host culture and adherence to or maintenance of the norms of the

culture of origin (referred to as enculturation; Berry & Kim, 1988; Berry, 2003). Berry

and Kim (1988) use the term *acculturation* to describe the two orthogonal processes.

However, it should be noted that majority of the literature on the Latino and Asian

American populations have used the term *acculturation* to refer to the process of adapting

to the majority culture while minimizing the adherence to the norms of one's culture of

origin (Kim, 2007).

Enculturation

Related to the construct of acculturation, the term enculturation has been used to

describe the process of socializing into and maintaining the cultural norms, salient values,

beliefs, and concepts of one's culture of origin (Cortes, Rogler, & Magady, 1994;

Herskovits, 1948; Kim, Soliz, Orellana, & Alamilla, 2009). The term enculturation refers

to one's maintenance of or introduction to their indigenous cultural values, beliefs, and

norms. An advantage of examining enculturation separately is that it allows researchers

to investigate how one's cultural background and process of learning and maintaining

cultural norms may be associated with help-seeking attitudes and behaviors, independent

from their process of adapting to the norms of the U.S. culture (Kim & Abreu, 2001). In

other words, enculturation is believed to operate independently of acculturation, despite

societal pressures to assimilate to the dominant culture (Lee, Yoon, & Liu-Tom, 2006).

Current instruments used to assess acculturation and enculturation have relied on

measuring the cultural changes that occur on the behavioral level, which include

behaviors such as language use, food preferences, participation, and cultural activities

(Kim & Abreu, 2001). A significant limitation is that they rely on changes in behavior as

a gauge of acculturation and enculturation, which do not consider how one maintains or

adheres to their culture of origin. They also ignore the cognitive and affective components that are being modified during the acculturative process (Cuellar et al., 1995). Furthermore, these instruments of enculturation lack the ability to measure one's adherence to traditional cultural values. Assessing cultural values in addition to behaviors and other dimensions allows for a more comprehensive understanding of the changes that occur at the cognitive level when Latinos negotiate between the cultural norms of the U.S. culture and their own indigenous culture (Kim et al., 2009).

Kim has argued that a critical limitation to Berry and Kim's (1988) theory of acculturation is that, while it captures the adaption and cultural maintenance processes experienced by foreign-born individuals, it does not accurately describe the experiences of U.S.-born minority group members. For example, second and third generation Latinos may have never been socialized into the Latino cultural norms by their family who may also be U.S. born. Therefore, the adaption process of cultural maintenance may not be appropriate for later generation Latinos who have not been fully enculturated into their cultural norms (Kim, 2007; Kim et al., 2009). Instead, the term acculturation can be used to describe the process of adapting to the norms of the new host culture and the term enculturation can be used to reflect the process of socializing or resocializing into and maintaining the norms of the culture of origin (Kim & Abreu, 2001; Kim et al., 2009).

As previously stated, enculturation and acculturation are believed to operate independently from one another, with past research demonstrating nonsignificant to moderate associations between the two constructs (Lee et al., 2011). It has been proposed that there are several important dimensions to acculturation and enculturation, which include behaviors, values, knowledge, and identity. Unfortunately, many of the existing

measures of acculturation/enculturation have predominantly focused on the behavioral dimension, while neglecting the values, knowledge, and identity dimensions (Kim & Abreu, 2001). In a review of 33 acculturation and enculturation measures, Kim and Abreu (2001) found that at least half of the items in over 85% of the instruments assessed the behavioral dimension, and 36% of the instruments exclusively targeted the behavioral dimensions of acculturation and enculturation. The behavioral dimensions that were assessed included questions that focused on activities such as language use, preferences and ability to communicate in a particular language, food preferences, and choice of ethnic friendships. By ignoring the evaluation of traditional cultural values dimensions in current acculturation/enculturation instruments, information about relational style, beliefs about human nature, and time orientation are not assessed (Kim et al., 2009).

Values enculturation, as measured by one's adherence to the cultural values is an important dimension within the conceptual framework of enculturation (Atkinson, 2004; Kim & Omizo, 2005). Current theories of acculturation and enculturation suggest that first-generation Latinos will adhere to Latino cultural values and norms more strongly than Latinos who are several generations removed from immigration (Kim, 2009; Kim & Abreu, 2001). Furthermore, adherence to Latino cultural values influences the ways in which Latinos understand their psychological problems, their beliefs about problem etiology, the ways they express their symptoms, and their help-seeking behaviors (Atkinson, 2004).

Acculturation, Enculturation, and Help-Seeking Attitudes and Behaviors

The empirical research examining the relationship between acculturation, enculturation, and Latinos' attitudes toward seeking psychological help has varied a great

deal. Some researchers have argued that less acculturated Latinos tend to have less favorable attitudes toward seeking help than more acculturated Latino adults (Rojas-Vilches et al., 2011; Wells, Golding, Hough, Burnam, & Karno, 1989). Others have found that greater acculturation was associated only with past treatment use (Miville & Constantine, 2006) and a greater willingness to seek psychological services (Kuo et al., 2015), but did not play a significant role in affecting help-seeking attitudes. Conversely, in other studies, enculturation, as opposed to acculturation, was found to be positively related to help-seeking attitudes (Ramos-Sanchez & Atkinson, 2009) as well as help-seeking intentions (Kuo et al., 2015; Ruelas, 1998).

Wells et al. (1989) speculated that acculturation played a significant role in help-seeking behaviors among Mexican Americans. Using a unidimensional measure of acculturation, where higher scores indicated greater acculturation to U.S. culture and lower scores indicated greater orientation to Latino cultural norms, the authors found that higher levels of acculturation among Mexican adults were positively associated with favorable attitudes toward using mental health services even after controlling for differences in sociodemographic and economic status.

Similar to these findings, Rojas-Vilches, Negy, and Reig-Ferrer (2011) explored attitudes toward mental illness, attitudes toward seeking professional help, and perceived stigma associated with receiving psychological help among Puerto Rican and Cuban American young adults and their parents. Acculturation in this study was assessed using a bidimensional measurement of acculturation, where acculturation and enculturation were measured separately. Findings from this study indicated that for both young adults and parents, greater acculturation toward the American culture was associated with less

pejorative beliefs toward mental illness. Moreover, among Latino parents, a greater orientation to the American culture was associated with favorable attitudes toward seeking psychological help. Conversely, for parents, higher orientation to the Latino culture (enculturation) was associated with less favorable attitudes toward seeking help. The findings from this study support previous research, suggesting that Latinos with higher acculturation to U.S. culture tend to have more favorable attitudes toward seeking help (Wells et al., 1989). However, Rojas-Vilches et al. (2011) did not find a significant relationship between attitudes toward seeking help and acculturation/enculturation among young Puerto Rican and Cuban American adults, suggesting that the differences between the groups' respective levels of acculturation could be attributed to their generation.

Miville and Constantine (2006) examined the role of acculturation and perceived social support in predicting help-seeking attitudes and help-seeking behaviors among Mexican American college students. Using a bidimensional measure of acculturation, the researchers found that a greater level of acculturation was a significant predictor of past experiences of seeking psychological help. Interestingly, neither acculturation nor enculturation were correlated to attitudes toward psychological help-seeking. This finding suggests that acculturation levels may have a greater influence on Latinos' help-seeking behaviors than on their help-seeking attitudes.

Kuo et al. (2015) applied structural equation modeling statistics to test a culturally expanded theory of reasoned action model of seeking help; this model included variables of stigma, acculturation *familismo*, and cultural and religious coping in a sample of Latino immigrants living in Canada. The authors in the study also used a bidimensional measure of acculturation. Similar to findings by Miville and Constantine (2006),

Canadian cultural orientation (acculturation) was found to be positively associated with help-seeking intentions but was not associated with help-seeking attitudes. Moreover, the relationship between Canadian cultural orientation and help-seeking intentions was mediated by subjective norms. Specifically, greater Canadian cultural orientation was associated with increased negative subjective norms, which, in turn, were associated with lower help-seeking intentions.

These seemingly conflicting findings suggest that greater adherence to Mexican culture does not necessarily serve as a barrier to Latinos' utilization of services, as previously believed. Instead, it is possible that greater adherence to Latino culture may encourage use of mental health services among Latinos. Ramos-Sanchez and Atkinson (2009) speculated that less acculturated Latinos are willing to use mental health services because Latino cultural values, such as *respeto* for educated professionals and authority figures, may encourage a greater willingness to use mental health services. These findings were also supported by Ruelas (1998), who found that highly enculturated Mexican Americans perceived therapists as more credible than less enculturated Mexican Americans. The authors suggested that as Mexican Americans lose their culture of origin, their attitudes about seeking help and providers become less favorable, resulting in less utilization of services. The problem with this assumption is that in both of these studies, enculturation was measured by behavioral enculturation, which does not capture one's adherence to Latino cultural values. In fact, this has been one of the major limitations within the Latino help-seeking literature. Failing to include validated measures of values enculturation limits our understating of the impact of cultural values on beliefs and norms on help-seeking attitudes and intentions. Thus, one of the goals of the present study was

to address this gap in the literature by using a validated measure of values-based enculturation.

Stigma and Beliefs about Mental Illness

Stigma has frequently been cited as a common barrier associated with seeking mental health treatment. Corrigan (2005) separated stigma into two distinct categories: self-stigma and public or social stigma. Self-stigma refers to the internalization or self-endorsement of the negative stereotyped messages that are attributed to someone who seeks mental health services (Corrigan & Rao, 2012; Vogel, Wade, & Hackler, 2007). Social stigma refers to the fear of being negatively evaluated by others for seeking mental health services (Corrigan, 2004; Komiya, Good, & Sherrod, 2000). Given the fear of stigmatization, an individual with a mental health disorder might not want to seek services or treatment due to negative perceptions of how others might perceive them.

The association between stigma and help-seeking attitudes has been well established across studies with different populations. For example, Vogel, Wade, and Hackler (2007) reported that self-stigma and positive attitudes mediated the relationship between public stigma and willingness to seek help. Similarly, Komiya, Good, and Sherrod (2000) found that stigma was an important predictor of attitudes toward help-seeking. The negative impact of stigma on help-seeking attitudes is important, given that negative attitudes toward psychological services have been demonstrated to suppress ones' intentions to seek counseling (Ægisdottir, O'Heron, Hartong, Haynes, & Linville, 2011; Cellucci, Krogh, & Vik, 2006; Vogel, Wester, Wei, & Boysen, 2005).

Mental health beliefs. Opinions about mental illness have been proposed as a variable explaining the variation of help-seeking attitudes among ethnic groups. Very few

studies have examined Latinos' beliefs about mental illness in relation to their help-seeking attitudes and intentions to seek psychological services. Within the Asian American literature, Lau and Takeuchi (2001) suggested that the lower rate of help-seeking behaviors among Asian Americans, relative to Whites, may be because Asian Americans have different views of mental illness and may not judge psychological problems in the same manner as Whites. It is likely that these different views of mental illness for Asian Americans have been shaped by their cultural norms and beliefs. There has been ample empirical evidence suggesting that among ethnic minority groups such as Asian Americans and Latinos, seeking treatment for mental illness is viewed as stigmatizing (Chen & Rizzo, 2010; Mendoza, Masuda, & Swartout, 2015). In fact, stigma has been regarded by the U.S. Department of Health and Human Services mental health report (2001) as "the most formidable obstacle" (p. 3) in the treatment of mental health disorders.

Mendoza et al. (2015) found that mental health stigma was negatively associated with help-seeking attitudes among their Latino sample. Mendoza et al. examined the role of mental health stigma and self-concealment as predictors of help-seeking attitudes. Their findings suggested that mental health stigma, but not self-concealment, was uniquely related to the recognition of need for psychological help. The authors suggested that mental health stigma and recognition of need may reflect the cultural belief that having a mental disorder is shameful and therefore must be resolved by oneself or within one's family. This finding is consistent with frameworks that examine Latino sociocultural contexts that stipulate that Latinos value protecting their family, make

decisions based on how they will reflect on their family, and believe that one should resolve personal difficulties on their own when confronted with psychological problems.

Negative perceptions of mental illness have been frequently thought to be an important factor influencing Latinos' help-seeking attitudes and behaviors. Researchers have postulated that within the Latino community, seeking help for mental health problems may be perceived as a sign of weakness of one's character and is associated with embarrassment and shame (Leong et al., 1995; Rojas-Vilches et al., 2011). These findings also suggest that those who are more enculturated, and those with greater adherence to traditional cultural values, may be more likely to hold negative beliefs about mental illness and hold greater stigmatizing beliefs about psychological treatment. Furthermore, these findings suggest that cultural beliefs about bringing shame, or *verguenza*, to one's family if others were to find out that they had a mental health disorder or were seeking treatment may significantly impact a Latino's willingness to seek treatment. Given the gap within the literature regarding Latinos' negative views about mental illness and its impact on intentions to seek psychological treatment, the current study investigated the mediating effect of stigma toward mental illness between Latino cultural values and help-seeking intentions.

Current Study

Culture can influence many aspects of mental health, including how individuals understand, express, and manifest their symptoms. Empirical studies have suggested that culture-related factors might help explain the disparities in service use among Latinos (Berdahl & Stone, 2009; Echeverry, 1997; Ramos-Sanchez, 2015; Vega, Kololdy, & Aguilar-Gaxiola, 2001). To that end, there has been a growing interest within the help-

seeking literature in investigating the role of culturally related determinants of help-seeking behavior among diverse populations. Acculturation has been frequently studied in relation to help-seeking attitudes and behaviors across various ethnically diverse samples (Leong et al., 2011; Sun et al., 2016; Yoon et al., 2013). Although acculturation has often been found to have a positive association with mental health outcomes, a number of empirical studies have found contrary findings. Similarly, even though enculturation has been studied less frequently, it has also yielded mixed results in relation to mental health outcomes (Sun et al., 2016; Yoon et al., 2013).

These mixed findings may be partially explained by the lack of diversity in acculturation and enculturation instruments. For example, various dimensions of acculturation and enculturation (i.e., behaviors, identity, and values) are believed to be differently associated with help-seeking attitudes and behaviors (Yoon et al., 2013). However, the majority of empirical studies on acculturation/enculturation and help-seeking attitudes/intentions among Latinos have focused on behavioral dimensions of acculturation or enculturation. It is plausible that examining a different dimension of acculturation/enculturation, such as adherence to cultural values, may lend important information to the empirical research on the role of enculturation differently predicting attitudes toward seeking mental health services, stigma toward mental illness, and intentions to seek services.

Ajzen and Fishbein's theory of reasoned action (1972; 2006) was broadly used as a theoretical framework to illustrate how Latinos' attitudes toward psychological services and their stigma toward mental illness can influence their help-seeking intentions. It is believed that these attitudes and beliefs are also shaped by Latino cultural context,

thereby influencing their intentions to seek treatment. It is important to gain a better understanding of how Latinos' cultural values, beliefs, and practices affect their understanding of mental illness and their decision to seek appropriate psychological treatment and services. Moreover, few studies have investigated how Latinos' attitudes about psychological treatment and stigma toward mental illness impact their intentions to seek services.

Furthermore, it is important to examine other attitudes related to intentions to seek services. For example, attitudes about mental illness and pejorative beliefs about those with a mental health disorder would likely significantly impact one's willingness to seek treatment. Attitudes and stigma toward mental illness frame the way individuals experience and express their feelings about their own emotional or psychological distress, in addition to shaping the way they perceive others with a mental illness (Ajzen & Fishbein, 1972; Hirai & Clum, 2000). Therefore, it stands to reason that these attitudes and beliefs will also impact one's treatment beliefs and behaviors.

Further, it has been proposed that for Latinos, their beliefs and attitudes about mental illness and seeking psychological treatment are likely to be influenced by their cultural beliefs, values, and by the attitudes of those in their immediate and extended network (Hirai, Vernon, Popan, & Clum, 2015; Kim et al., 2009; Kuo et al., 2015). It is also believed that stigma toward mental health illness is related to intentions to seek mental health services and that culture values are related mental health stigma.

Thus, the present study aimed to extend the body of literature on the relationships between values enculturation, attitudes related to psychological treatment, stigma toward mental illness, and intention to seek psychological services. As previously reviewed,

measurements of enculturation have been limited to inventories measuring behavioral indicators of culture retention (i.e. language use, participation in cultural activities; Kim et al., 2009), which fail to capture culture changes or adherence to cultural values of enculturation.

The current study investigated the construct of enculturation by focusing on the values dimension of enculturation, which was assessed using the Latino Cultural Values scale (LVS; Kim et al., 2009). This scale measures one's adherence to Latino cultural values. The present study utilized the LVS-Familismo and LVS-Cultural Pride subscales in the main study analyses. Using both the LVS-Familismo and LVS-Cultural Pride subscales to represent the construct of values enculturation allowed for a more in-depth analysis of the relationship between values enculturation and the main study variables. Furthermore, in order to examine and compare the values dimension of enculturation with the behavioral dimension of enculturation, the Acculturation Rating Scale for Mexican Americans-II (ARSMA; Cuellar, Arnold, & Maldonado, 1995) and the subscales: Anglo orientation (AOS) and Latino orientation (LOS) were used. Both of these subscales (AOS and LOS) represent the behavioral measures of acculturation and enculturation, respectively).

Psychological help-seeking attitudes in the current study was examined using two subscales from the BAPS scale (Ægisdottir & Gerstein, 2009): beliefs about stigma tolerance for seeking psychological services (stigma tolerance) and beliefs about psychologists' expertise (expertness). The construct of stigma toward psychological disorders was examined using the Beliefs Toward Mental Illness scale (BTMI; Hirai & Clum, 2000). Help-seeking intentions was measured using an item from the General

Help-seeking Questionnaire (GHSQ; Wilson, Deane, & Ciarrochi, 2005), and depression symptoms were examined using the Center for Epidemiologic Studies Depression scale (CES-D-10; Andresen, Malmgren, Carter, & Patrick, 1994).

The current study was also interested in examining the mediating and moderating pathways linking adherence to Latino cultural values (cultural pride and *familismo*) and help-seeking intentions. One of the aims of the study was to explore whether Latinos' stigma toward mental illness and their attitudes related to seeking psychological treatment might explain the process by which values enculturation predicts Latinos' intentions to seek mental health services. Secondly, depression symptoms were examined as a moderator of the relationship between values enculturation and intention to seek services. The following hypotheses were tested.

Hypotheses

Hypothesis 1 consisted of five parts, utilizing five separate hierarchical multiple regressions. The current researcher hypothesized that the addition of both Latino cultural values (cultural pride and *familismo*) would improve the prediction of attitudes toward psychological illness and treatment (expertness, stigma tolerance, and stigma toward mental illness), in addition to help-seeking intentions and depression symptoms. It was hypothesized that the Latino values of cultural pride and *familismo* would account for a significant amount of variance in predicting help-seeking attitudes, stigma toward mental illness, and help-seeking intentions, even after controlling for the confounding variables of behavioral acculturation/enculturation, and demographic variables.

The dependent variables of interest were: (1a) beliefs about psychologists' expertness, (1b) stigma tolerance, (1c) stigma toward mental illness, (1d) intentions to

seek therapy, and (1e) depression symptoms. Specific predictions for each hypothesis were as follows.

1a) Latino cultural values of *familismo* and cultural pride will account for a significant amount of variance in predicting positive attitudes of expertness, above and beyond the variance accounted for by behavioral acculturation/enculturation and demographic variables.

1b) Latino cultural values of *familismo* and cultural pride will account for a significant amount of variance in predicting stigma tolerance, above and beyond the variance accounted for by behavioral acculturation/enculturation and demographic variables.

1c) Latino cultural values of *familismo* and cultural pride will account for significant amount of variance in predicting stigma toward mental illness, above and beyond the variance accounted for by behavioral acculturation/enculturation and demographic variables.

1d) Latino cultural values of *familismo* and cultural pride will account for significant amount of variance in predicting help-seeking intention, above and beyond the variance accounted for by behavioral acculturation/enculturation and demographic variables.

1e) Latino cultural values of *familismo* and cultural pride will account for significant among of variance in predicting depression scores, above and beyond the variance explained by behavioral acculturation/enculturation and demographic variables.

Hypothesis 2: To study the mechanisms by which adherence to Latino cultural values influence help-seeking intentions among Latinos, a multiple mediation analysis (Hayes, 2018; Preacher & Hayes, 2008) was used to test the ability of three separate mediators to mediate the relationship between Latino value of cultural pride and help-

seeking intentions. It was proposed that attitudes about psychological treatment, such as

the belief about psychologists' expertise (expertness; M_1) and stigma tolerance about

seeking psychological services (stigma tolerance; M_2), in addition to pejorative beliefs

about others with mental illness (BTMI; M_3), would each significantly mediate the

relationship between the Latino value of cultural pride (X) and help-seeking intentions

(Y) among Latinos. For a conceptual representation of the model, see Figure 1.
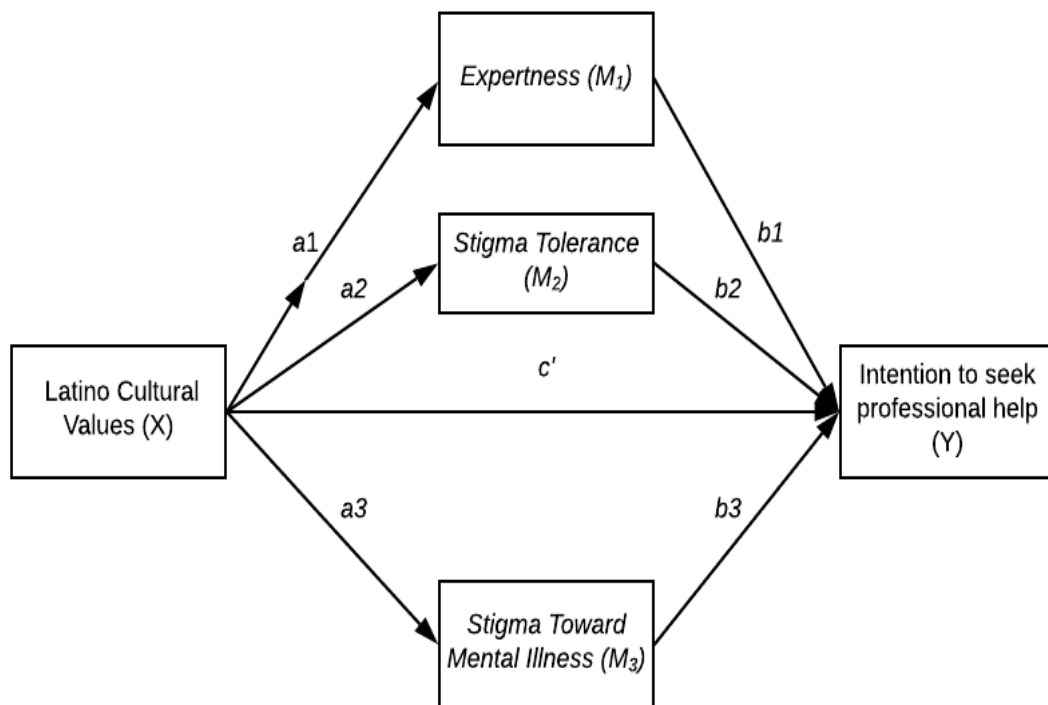
Figure 1. Proposed Parallel Multiple Mediation Model among Latino cultural values and intentions to seek help through help-seeking attitudes and stigma toward mental illness.

2a) The predictor variable of cultural pride (LVS-Cultural Pride) will influence intentions

to seek help because of the specific indirect effect of the attitude of expertness.

Specifically, it was predicted that greater adherence to the value of cultural pride will be

associated to the perceptions of psychologists' expertness; which, in turn, favorable

perceptions of psychologists' expertness will be positively related to intentions to seek help. A direct link between cultural pride and intent is not expected. However, it was proposed that expertness would mediate the relationship between the Latino value of cultural pride and intent.

2b) It was hypothesized that stigma tolerance would mediate the relationship between cultural pride and intention; specifically, that cultural pride would be negatively related to stigma tolerance, and in turn, stigma tolerance would be negatively related with intentions to seek psychological help.

2c) Finally, it was hypothesized that the Latino value of cultural pride is indirectly related to help-seeking intention through its relationship with stigma toward mental illness. Specifically, it was predicted that greater adherence to cultural pride would be positively related to greater stigma toward mental illness (i.e., BTMI), and in turn, greater stigma toward mental illness would be negatively associated with intentions to seek help.

Hypothesis 3: Similar to hypothesis 2., a second multiple mediation model was conducted to explore the mechanisms by which adherence to the Latino cultural value of *familismo* influences help-seeking intentions among Latinos. Specifically, the mediating effects of expertness (M_1), stigma tolerance (M_2), and stigma toward mental illness (M_3) on the relationship between the Latino value of *familismo* (X) and intentions to seek mental health services (Y) were tested (see figure 1).

3a) The Latino value of *familismo* was predicted to be negatively related to Latinos perceptions of psychologists' expertness, and in turn, lower perceptions of psychologists' expertness would be significantly related to lower intentions to seek mental health services.

3b) The Latino value of *familismo* was predicted to be negatively related to stigma tolerance; in turn, stigma tolerance was expected to have a positive relationship with intentions to seek help. As such, *familismo* would be a significant predictor of help-seeking intentions because of the mediating effect of stigma tolerance on the relationship between *familismo* and intentions to seek help.

3c) Finally, the Latino value of *familismo* was hypothesized to be positively associated with greater stigma toward mental illness (BTMI), and in turn, a negative relationship was expected between BTMI and intentions, such that greater stigma toward mental illness would be associated with lower intentions to seek mental health services. It was predicted that the Latino value of *familismo* would predict help-seeking intentions as a result of the mediating effect of stigma toward mental illness.

Hypothesis 4: It was predicted that the mediating effect of attitudes of psychological treatment (i.e., stigma tolerance and expertness) and stigma toward mental illness on the relationship between Latino cultural pride and intent would be moderated by depression symptoms. Three individual moderated mediation analyses were conducted to examine the conditional indirect effects of depression on the relationship between the Latino value of culture pride and intentions through specific mediators (see Figure 5).

4a) Expertness will mediate the relationship between cultural pride and help-seeking intent, with depression symptoms acting as a moderator. As such, depression symptoms will moderate the predictor-mediator pathway.

4b) Stigma tolerance will mediate the relationship between cultural pride and help-seeking intent, with depression symptoms acting as a moderator within the meditational pathway. Depression will moderate the predictor-mediator link such that the indirect

effect of stigma tolerance mediating the relationship between cultural pride and intent will be stronger at higher levels of reported depression symptoms.

4c) Stigma toward mental illness will mediate the relationship between cultural pride and help-seeking intent, with depression symptoms acting as a moderator within the predictor-mediator pathway.

Hypothesis 5: It was predicted that the mediating effect of attitudes of psychological treatment (i.e., stigma tolerance and expertness) and stigma toward mental illness on the relationship between Latino value of *familismo* and intent would be moderated by depression symptoms. Three individual moderated mediation analyses were conducted to examine the conditional indirect effects of depression on the relationship between Latino value of *familismo* and intentions through specific mediators (see Figure 6).

5a) Expertness will mediate the relationship between *familismo* and help-seeking intent, with depression symptoms acting as a moderator within the meditational pathway. Depression will moderate *familismo* and expertness in the model.

5b) Stigma tolerance will mediate the relationship between *familismo* and help-seeking intent, with depression symptoms acting as a moderator within the meditational pathway. Depression will moderate the predictor-mediator link such that the indirect effect of stigma tolerance mediating the relationship between *familismo* and intent will be stronger at higher levels of reported depression symptoms.

5c) Stigma toward mental illness will mediate the relationship between *familismo* and help-seeking intent, with depression symptoms acting as a moderator within the predictor-mediator pathway.

CHAPTER III

METHOD

Participants

Latino participants were recruited from a large community cultural event, a moderately sized university in the Midwest, and through various online social networking sites (i.e., Facebook) that targeted Latino populations. Appropriate approval for the survey methodology was received from the Institute Review Board of the affiliated institution. There were 238 participants that agreed to participate in the study. All participants in the study were at least 18 years of age and self-identified as Latino or Hispanic. Out of the 238 participants, 18 surveys were excluded due to incomplete data, where less than 80% of the survey was completed. In addition, survey responses where participants demonstrated poor and variable effort were excluded. Poor and variable effort was defined as careless responding, without regard to the test items. For example, this may include a person who selects from all options on a scale in a repeated pattern of "1, 2, 3, 4" or instead consecutively selects the option of "0" or "6" on a scale, without regard to content (Meade & Craig, 2012). Poor effort was also defined as individuals who completed the entire questionnaire in an unrealistic time frame (e.g., seconds or under 5-10 minutes).

Among the 220 remaining Latino study participants, there were 161 (73%) women and 59 (27%) men. Participants ranged in age from 18-84 years ($M = 36$, $SD = 14.57$). All participants identified as Latino; the majority of participants (89%) self-identified their ethnicity as Mexican ($n = 115$), Mexican American ($n = 65$), or Chicano ($n = 16$), followed by 5% Central South American ($n = 11$), 3.6% Puerto Rican ($n = 8$),

1.8% other ($n = 4$), and 0.5% Cuban ($n = 1$). Seventy-six percent of participants chose to complete the packet of questionnaires in English, while 24% completed measures in Spanish. Sixty-seven participants indicated that they were born in the United States, while 33% expressed being born in a different country. Among those born outside of the United States, the average number of years lived in the United States was 23 years, with most migrating to the United States at 18 years of age. Family characteristics of participants revealed that 46.8% identified as single ($n = 103$), 40.5% were married ($n = 89$), 7.3% indicated living with significant other ($n = 16$), 2.3% were widowed ($n = 3$), and 1.4% ($n = 3$) identified as either separated or divorced, respectively. The number of children in the household ranged from 0 to 6, with the average number of children in each Latino household being 1 ($SD = 1.52$).

Participants appeared to be well educated, with 33% having received a bachelor's or graduate degree and 36% reported having attended at least some college or university. Thirty-six percent ($n = 80$) indicated that they were a student. Participants also varied regarding income; 65.6% reported a family annual income of less than $50,000, 29% reported that their annual family income was more than $20,000 but less than $35,000, and 18% reported an income of over $75,000. The full results for the participants' descriptive statistics can be seen in Table 1.

Table 1

Descriptive Statistics for Participant Demographic Characteristics (N = 220)

Variable	*n*	*%*	*M*	*SD*
Age	-	-	36	14.72
Gender				
Male	59	27.5		
Female	164	73.5		
Nativity Status				
Foreign Born	73	33		
U.S. born	148	67		
Marital Status	103	46.8		
Single	89	40.5		
Married	3	1.4		
Divorced	3	1.4		
Separated	5	2.3		
Widowed	16	7.3		
Living with a significant other	1	0.5		
Other				
Annual Family Household income		7.1		
Under $10,000	15	14.6		
More than $10,000, but less than $20,000	31	29.2		
More than $20,000, but less than $35,000	62	14.6		
More than $35,000, but less than $50,000	31	16		
More than $50,000	34	18.4		
Over $75,000	39			
Total years attended school				
Less than high school	16	7.3		
Some high school but no degree	15	6.9		
High school degree or (GED)	36	16.5		
Some college or University	79	36.2		
Bachelor's degree	27	12.4		
Graduate Degree	45	20.6		

Recruitment Procedures

  Community cultural event. Latino participants were approached by bilingual research assistants at a community cultural event. Potential participants who met the requirements and agreed to participate in the study were provided with information about the goals and purpose of the study, risks and benefits, and confidentiality. Once consent was provided from the participants, a study questionnaire was presented. The participants were given the option to complete the paper and pencil questionnaire in Spanish or English. Participants were notified that the questionnaire took approximately 30-50 minutes to complete and were given the opportunity to ask any questions as needed for clarification, in addition to discontinuing at any time. To ensure the confidentiality of the surveys, names were not provided on questionnaires. Completed questionnaires were briefly scanned by a research assistant for missed items. Questionnaires were then placed in a secure box monitored by research assistants and participants were provided with a referral list of community mental health providers and compensated with $10 in cash.

  Online. The study flyer and URL link were provided in various online groups to interested participants via Survs (survs.com), which is a secure website where all of the collected data were stored. On the study's homepage, potential participants who met the inclusionary criteria and agreed to participate in the study were provided with information about the goals and purpose of the study, risks and benefits, and confidentiality. Informed consent was obtained when participants checked a box indicating that they had read and understood the study description and agreed to participate in the study. Once consent was obtained from the participants, a study questionnaire was presented. The online questionnaire was available in both English and

Spanish. Upon completion of the survey, participants were instructed to enter their email address in order to receive compensation for completing the study. Participants were given the option of choosing to receive a $10 gift card for either Amazon or Target.

Measures

Demographic information. Participants completed a survey of demographic information, including date of birth, gender, marital status, number of children and adults in household, cultural heritage, country of birth, years having lived in the United States, first member of family to immigrate to the United States, household and personal annual income, years attended school, current student status, and occupation.

Beliefs About Psychological Services scale. The BAPS scale (Ægisdottir & Gerstein, 2009) is an 18-item scale designed to measure attitudes toward seeking professional help from a psychologist for psychological problems. The scale was based on the original 1970 ATSPPH scale and theoretically based on the TPB. The BAPS was made with the intention of developing a scale with stronger validity and reliability than previous help-seeking inventories. The BAPS yields both a total score and three independent subscales: stigma tolerance, expertness, and intent. The stigma tolerance factor corresponds to the construct of normative beliefs as outlined in the TPB. This factor represents the person's perception of perceived societal barriers and their negative views regarding seeking psychological services. The expertness factor corresponds to Fishbein and Ajzen's (1975) construct of attitude, which refers to an individual's perceived beliefs about a behavioral outcome. Therefore, expertness measures the individual's beliefs regarding characteristics about psychologists and their services due to their training. Finally, the intent factor corresponds to the TPB's intention construct.

Each item is rated on a 6-point Likert-type scale ranging from "strongly disagree" (1) to "strongly agree" (6). There are 11 positively worded items and seven negatively worded items. The negatively worded items are reverse scored before analysis. Scoring consists of adding up the values for each subscale and dividing by the number of items. Scores range from 1-6, with higher scores reflecting more positive views of psychologists and their services (Ægisdottir, & Gerstein, 2009). Higher mean scores for expertness, stigma tolerance, and intent represent greater beliefs in the merits of psychological services due to psychologists' expertness, greater tolerance for stigma in seeking professional psychological services, and greater willingness to seek help if needed, respectively. Example items include: "I would be willing to confide my intimate concerns to a psychologist" and "Going to a psychologist means that I am a weak person" (Ægisdottir & Gerstein, 2009).

Using a sample of 243 students to examine psychometric properties of the BAPS scale, the authors of the scale, found that Cronbach's alpha for the total scale was .88 and each item was found to contribute significantly to the total score, as evidenced by the decreased Cronbach's alpha after deleting an item. Furthermore, the three-factor model of the BAPS was validated through both exploratory and confirmatory factor analyses, providing evidence for three separate factors. The Cronbach's alphas for the subscales were .82 for intent, .78 for stigma tolerance, and .72 for expertness. Currently, the BAPS has not been used or validated with a Latino population. Therefore, this will be the first study to use this measure with a Latino population.

Unlike other measures of help-seeking attitudes that focus on a single construct of attitude, the BAPS measures multidimensional aspects of attitudes toward seeking

psychological services that are theoretically based on the TPB (Ajzen, 1985). Ægisdottir and Gerstein (2009) recommended that future studies utilize the three subscales scores (stigma tolerance, expertness, and intent) instead of the total score. The authors cautioned that a total score may be used; however, the total score reflects not only attitudes and beliefs about psychological services, but also a person's willingness to seek psychological services. In the present study, Cronbach's alphas for the subscales were .87, 80, and .83 for intent, stigma tolerance, and expertness, respectively.

The present researcher followed Ægisdottir and Gerstein's (2009) recommendations to use subscale scores rather than the combined total score. The option to separate attitudinal items from intent items allowed for separate analyses of the stigma tolerance and expertness subscales, which represented facets of attitudes toward psychological treatment. Although the intent subscale was designed to measure a construct other than help-seeking attitudes, visual inspection of the six items provided evidence that not all items corresponded to the construct of willingness or intention to seek help. For example, some questions were consistent with assessment of intention (e.g., "At some future time, I might want to see a psychologist"). However, some of the items also related to one's opinions or beliefs about psychologist or treatment (e.g., "Seeing a psychologist is helpful when you are going through a difficult time in your life"). This is confusing, as not all items on the intention scale appear to measure behavioral intention. Moreover, a bivariate correlation analysis of the three BAPS subscales revealed high inter-correlations between the intent and expertness subscales (r = .77). As such, it was decided to retain the use of the stigma tolerance and expertness subscales while omitting the intent subscale in the main study analyses.

Help-seeking intention. Intention to seek help from a mental health professional was measured using a single item from the General Help-seeking Questionnaire (GHSQ; Wilson, Deane, & Ciarrochi, 2005). The GHSQ is a 14-item measure that was designed for use in a matrix format that could be modified based on the researcher's purpose and need. Participants were given the prompt to rate how likely they were to seek help from various informal sources (e.g., friend, partner, parents, other relatives), formal sources (mental health professionals, phoneline, general physician), and from no one if they were experiencing a personal or emotional problem on a 7-point scale ranging from "Extremely unlikely" to "Extremely likely." The authors have suggested that help-seeking intentions can be reported several ways: as a total score, as three subscales (informal help, formal help, and help from no one), or by examining individual sources of help (Wilson et al., 2005).

It was decided that using a total score of the GHSQ would not be appropriate, as the total score includes evaluations of receiving help from both formal and informal sources. Similarly, among the three formal help sources measured, only one was relevant to the criterion of seeking help from a mental health professional. The single-item question from the GHSQ asked participants "How likely is it that you would seek help from a mental health professional (psychologist, psychiatrist, and counselor) if you were experiencing a personal or emotional problem?"

This single item is consistent with suggestions by Ajzen (2006) for developing measures of intent based on the TPB. Further, the single-item measure of help-seeking intentions correlated positively with the BAPS intent scale ($r = .46$, $p = .000$), suggesting evidence for convergent validity. While single-item measures are vulnerable to several

psychometric disadvantages (e.g., lack of internal-consistency reliability, low content validity, and low sensitivity), there are also advantages of using a single-item measures. These advantages include higher face-validity, fewer questions, minimizing burden on participants—important when adapting to different and difficult populations—and the ability to assess simple unidimensional constructs, such as future behaviors (Hoeppner, Kelly, Urbanoski, & Slaymaker, 2011). Freed (2013) also supported the use of single-item measures, indicating that when the construct is one dimensional and well understood (e.g. such as future behaviors), then a single-item measure may suffice.

Help-seeking intentions or behaviors as measured by a single-response item have also been effectively utilized in previous studies (e.g., Deane & Chamberlain, 1994; Deane et al., 1999; Deane & Todd, 1996; Miville & Constantine, 2006). Furthermore, in a recent review of measures of help-seeking intentions by White, Clough, and Casey (2018), it was determined that none of the measures evaluated provided a complete assessment of the help-seeking intentions construct, as many of the existing instruments measured multiple facets of help-seeking intentions (i.e., perceptions of support, evaluations of the problem, perceptions of help-seeking etc.). Therefore, using a single measure of help-seeking intention would allow for the control of the scope and focus of the construct that is being measured.

Stigma Towards Mental Illness. The BTMI scale was utilized as a measure of stigma associated with mental illness. The BTMI is a 21-item self-report measure of negative stereotypical views of mental illness (Hirai & Clum, 2000). Items are rated on a 6-point Likert scale ranging from "completely disagree" (0) to "completely agree" (5). This measure yields a total score that is obtained by taking the sum of all 21 responses of

the BTMI, with higher scores reflecting more negative beliefs. Additionally, the measure also has three subscales confirmed by factor analysis: (a) dangerousness, which represents the belief that those with a mental illness are dangerous ("A mentally-ill person is more likely to harm others than a normal person"); (b) poor social and interpersonal skills, which refers to the belief that those with a mental illness have poor social skills and are untrustworthy, and taps into feelings of shame about mental illness ("I would be embarrassed if a person in my family became mentally-ill"); and (c) incurability, which refers to the belief that most mental illnesses cannot be treated or cured ("Psychological disorder is recurrent;" Hirai & Clum, 2000).

The original study used a culturally diverse sample of 216 students to develop the measure and reported a high Cronbach's alpha for the total score (.91) and moderate to good alphas for the three subscales: dangerousness (.75), poor social skills (.84) and incurability (.82; Hirai & Clum, 2000). This measure has been used in two recent studies using a Latino population (Hirai, et al., 2015; Rojas-Vilches et al., 2011). Rojas-Vilches et al. (2011) reported high Cronbach's alphas for each of the BTMI subscales (dangerousness, poor social skills, and incurability) .93, .95, and .91, respectively. Hirai et al. (2015) used the BTMI total score as a measure of stigma toward psychological disorders in their study based on the recommendations from a recent psychometric study on the BTMI (Royal & Thompson, 2013), suggesting that the BTMI scale is unidimensional. Hirai et al. (2015) reported a high alpha for the total score (.91) and moderate alphas for the subscales, ranging from .80 to .84. The current researcher followed the recommendations made by prior researchers (Hirai et al., 2015; Royal & Thompson, 2013) and used the total BTMI score as a measure of pejorative attitudes of

mental illness. A high alpha for the total scale (.92) was found for the present study.

Values Enculturation. The LVS is a 35-item scale designed to measure enculturation by assessing a person's adherence to Latino cultural values such as *familismo*, respect, affection, trust, congeniality, dignity, and cultural pride (Kim, Soliz, Orellana, & Alamilla, 2009). Each item is rated using a 4-point scale ranging from 1 (strongly disagree) to 4 (strongly agree). The LVS instruments yield a total score (LVS-total) and four subscale scores: cultural pride (LVS-Cultural Pride), *simpatia* (LVS-Simpatia), *familismo* (LVS-Familismo), and *espiritismo* (LVS-Espiritismo). Mean scores for each subscale are obtained and higher scores indicate greater adherence to Latino cultural values (i.e., higher values enculturation).

Using a sample of 147 Latino participants, Kim et al. (2009) reported a coefficient alpha of .88 for the total scale and coefficient alphas of .89, .65, .75, and .53 for the dimensions of cultural pride, *simpatia*, *familismo*, and espiritismo, respectively. Due to relatively low coefficients of internal reliability for LVS-Simpatia and LVS-Espiritismo, it was recommended by the authors that these subscales scores should not to be used in future studies. The Cronbach's alpha scores in the present study also yielded low coefficient scores for both subscales (.46 and .39, respectively). Instead, it has been recommended that the scores from the LVS-total and LVS-Cultural Pride and LVS-Familismo subscales be used. For the present study, both the LVS-Cultural Pride and LVS-Familismo subscales were used, with higher scores indicating a stronger adherence to Latino cultural values (i.e., higher values enculturation). Both the LVS-Cultural Pride and LVS-Familismo subscales were utilized and examined separately in the current study. The use of the LVS subscales allowed for a more comprehensive measure of

enculturation where differential effects of various value dimensions of enculturation were explored.

Another advantage of using the subscales over the total LVS score is that different value dimensions of enculturation (i.e., LVS-Cultural Pride and LVS-Familismo, separately) can be examined in relation to attitudes toward mental health and intentions to seek psychological treatment. Therefore, results may provide researchers with a richer understanding of how specific cultural values distinguish Latinos on various psychological outcomes and processes. In contrast, utilizing the total score of the LVS cannot provide specific information on the effects of different Latino cultural values, but instead can provide evidence of a potential relationship between adherence to Latino cultural values and desired outcome. Cronbach's alphas for LVS-Familismo and LVS-Cultural Pride subscales were .77 and .71, respectively, and .83 for the LVS-total score in the present study. These scores are consistent with coefficients reported in the original study (.75, .75, and .78, respectively).

Behavioral measures of acculturation and enculturation. The Acculturation Rating Scale for Mexican Americans II (ARSMA-II) is a 12 item self-report measure that uses an orthogonal multidimensional approach to assess the acculturation process by measuring cultural orientation toward Mexican culture and Anglo culture independently (Cuellar, Arnold, & Maldonado, 1995). This measure assesses language use and preferences, cultural heritage, and ethnic behaviors. Items are rated on a 5-point Likert scale ranging from 1 (not at all) to 5 (extremely often or almost always). The ARSMA-II has two subscales: the Anglo Orientation Subscale (AOS) and the Latino Orientation Subscale (LOS). Cuellar, Arnold, and Maldonado (1995) reported split-half reliability of

.77 for the AOS and .84 for the LOS and coefficient alphas of .83 for the AOS and .88 for the LOS. Mean scores are calculated for each subscale. The current researcher used the two ARSMA-II subscales as measures of behavioral acculturation (AOS) and behavioral enculturation (LOS). Cronbach's alphas were moderate to high for the AOS and LOS; reported alphas were .78 and .87, respectively, for the present study.

Depression symptoms. The Center for Epidemiologic Studies Depression scale (CES-D-10) is a 10-item self-report measure designed to measure depressive symptomatology (Andresen, Malmgren, Carter, & Patrick, 1994). The CES-D-10 is a short form of the original CES-D screening instrument for symptoms of depression (Radloff, 1997). Item responses are based on a 4-point Likert scale, ranging from 0 (rarely or none of the time/Less than 1 Day) to 3 (most or all the time/5-7 days). CES-D scores range from 0-30, with high scores indicating more symptoms, weighted by frequency of occurrence during the past week. Items are summed and a cutoff point of 10 or greater has been suggested to identify participants with depressive symptoms (Andresen et al., 1994). The CES-D has been translated into Spanish and its psychometric properties have been validated in previous studies using a Latino population (Grzywacz et al., 2010). An analysis of data obtained in previous samples with a Latino population indicated acceptable internal consistency with older adults (Cronbach's alpha of .75; Jang et al., 2011) and among non-clinical samples (Cronbach's alpha of .78). A Cronbach's alpha of .84 was found for the present study.

CHAPTER IV

RESULTS

Data Screening

All data were analyzed using SPSS v.25 (IBM Corp, 2018). Prior to conducting a

descriptive analysis, a preliminary analysis was conducted to ensure that the data were

complete and normal. The data were examined for univariate outliers, missing values,

and assumptions of univariate and multivariate normality. Missing data patterns and

actions taken to address missing data were examined by conducting a search for the

missing values of the participants that completed less than 80% of the measures (i.e.,

those with missing data from one measure or more). During the analysis, it was

determined that 18 participants completed less than 80% of the survey; therefore, their

data were removed from the analyses. Next, missing data were screened to identify

potential patterns and to rule out that missing data did not depend on any other variable

(Dong & Peng, 2013). Utilizing SPSS v.25, a missing value analysis was conducted, and

the chi-square statistic was used to test whether missing values were missing at random

or missing completely at random, using the Little's Missing Completely at Random

procedure. The findings yielded a chi-square = 28.43 ($df = 25$, $p < .29$), which indicated

that there was evidence to support that data were missing at random and no identifiable

pattern for the missing data was observed. Therefore, missing values were considered

appropriate to imputed missing values using the expectation maximization method

(Tabachnick & Fidell, 2013).

      Checking for univariate normality. To detect univariate outliers, the variables

were standardized; cases whose standardized z-scores exceeded the absolute value of

3.29 were deemed to be outliers (Tabachnick & Fidell, 2013). Two cases met this

criterion and were then winsorized to the next highest value (Tabachnick & Fidell, 2007).

The skewness and kurtosis for each variable was observed and if their z-value (i.e.,

skewness and kurtosis statistic/standard error) exceeded ± 3.29, the data were considered

significantly skewed or kurtos. The cutoff value of ± 3.29 has been recommended for

medium samples sizes between 50 and 300, as it corresponds to a p value of .001

(Tabachnick & Fidell, 2013). It was determined that the three following variables were

significantly skewed due to their index scores exceeding ± 3.29: BAPS Expertness (-

4.33), ARSMA-II AOS (-6.08), and CES-D (4.22). These three variables were

transformed using a square root function; therefore, all subsequent analyses were

conducted using both the transformed variables and un-transformed main study variables

(Tabachnick & Fidell, 2013). When a subsequent analysis was conducted with

transformed variables, the results did not significantly differ from the initial analyses

conducted using the untransformed data. As a result, it was decided to report the findings

using the untransformed data for ease of interpretation.

Multicollinearity among the main study variables was assessed via

multicollinearity diagnostics (i.e., Tolerance and variance inflation factor; VIF).

Multicollinearity becomes problematic when tolerance values are below 0.1 and VIF

values exceeds 10. An inspection of the data showed that tolerance values ranged from

.64 to .89, and VIF values did not exceed 10; as such, multicollinearity was not a

problem. Multivariate outliers were identified using Mahalanobis distance, Leverage

values, and Cook's distance for each variable. The Mahalanobis distance was determined

for each variable and compared against the chi-square distribution using a p-value of

0.0001. Leverage values were generated for each case, and cases with values of 0.5 or higher were considered problematic. All leverage values were less than 0.2 and considered adequate. Multivariate outliers, using Cook's *D*, were evaluated based on values that exceeded 1. Values that exceeded Mahalanobis distance or Cook's distance were evaluated for each multivariate analysis and winsorized to the next highest value (Tabachnick & Fidell, 2007).

After eliminating multivariate outliers, the assumptions of multivariate normality, linearity, and homoscedasticity were tested. Using procedures recommended by Tabachnick and Fidell (2013), multivariate normality was identified using normal probability plots of the standardized residual plots. Linearity and homoscedasticity were tested using both normal probability plots and scatter plots to determine that points in the normal probability plot mostly clustered toward the diagonal. Standardized residual values were also examined and scores that exceeded ±3.0 were further investigated.

Descriptive Analyses

Descriptive statistics of the nine main study variables were calculated and are presented in Table 1. Included were means and standard deviations for all measures, as well as alpha scores and ranges of scores. Descriptive analyses revealed that in terms of cultural orientation, as measured by the ARSMA-II, participants reported moderate to high mean scores on both the AOS and LOS ($M = 3.83$, $M = 3.62$, respectively), which is like previous reports (AOS $M = 3.64$, LOS $M = 3.79$; Torres & Mata-Greve, 2017). Using an orthogonal acculturation category, this sample is consistent with the typology of high bicultural orientation (LOS > 3.59; AOS > 3.7; Bauman, 2005). In other words, mean

scores on the ARSMA-II indicated that participants reported higher scores on both Latino and Anglo orientations, with slightly higher scores on Anglo orientation.

With respect to the construct of value enculturation, which was measured by participant's adherence to traditional Latino cultural values, mean scores for the two Latino cultural values of cultural pride (LVS-Cultural Pride) and *familismo* (LVS-Familismo) were moderately endorsed by participants ($M = 2.90$, $M = 2.82$, respectively). These mean scores for the LVS subscales were slightly lower than the scores reported in the original validation study (cultural pride $M = 3.10$, *familismo* $M = 3.12$; Kim et. al., 2009). Mean scores for the BAPS expertness and stigma tolerance subscales revealed that participants indicated somewhat positive attitudes toward seeking psychological treatment. Mean scores for stigma tolerance and expertness ($M = 4.40$, $M = 4.30$, respectively) were comparable to those previous reported in a sample of non-Latino White college students ($M = 4.90$, $M = 4.65$). Scores on the BTMI revealed that Latino participants had relatively low levels of stigma toward mental illness ($M = 38.18$; $SD = 19.96$); these mean scores were aligned with scores reported in a previous study with advanced college level Latino students ($M = 38.15$; $SD = 17.52$; Hirai et al., 2015).

Finally, reported depression scores (CES-D) among Latino participants were moderate to high ($M = 10.20$, $SD = 6.64$), using the suggested cut-off score of 10 or higher (Andresen et al., 1994; Gonzalez et al., 2017, Radloff, 1977; Vera, Alegria, Freeman, Robles, Rios, & Rios, 1991). On average, participants in the study indicated experiencing significant depressive symptoms "during the past week." Previous studies using the 20-item CES-D scale with the cutoff score of 16 or greater have also reported moderate to high levels of depression symptoms, with CES-D mean scores ranging from

15.57 to 19.39 (Torres, 2010; Torres & Taknint, 2015; Torres & Vallejo, 2015). In contrast, recently reported mean scores from the Hispanic Community Health Study/Study of Latinos (HCHS/SOL; Camacho et al., 2015) indicated that female and male scores on the CES-D-10 were well below the cutoff score of 10 ($M = 7.91$, $M = 6.01$, respectively). Depression symptoms between women and men in the current study indicated that mean scores (Female $M = 10.27$; Male $M = 10.11$) were still higher than those reported in the HCHS/SOL multisite cohort study. While the current sample is taken from a nonclinical population, the moderate to high depression symptoms observed in this present sample provide support in favor of measuring treatment seeking intentions and attitudes among a symptomatic sample of Latino adults.

Table 2

Descriptive Statistics for Main Study Variables (N = 220)

Variable	α	Range	*M*	*SD*
Beliefs about Psychological Services (BAPS)				
Stigma tolerance	.796	1 to 6	4.40	.96
Expertness	.834	1 to 6	4.30	1.14
Stigma Towards Mental Illness (BTMI)				
BTMI - Total Score	.920	0 to105	38.18	19.96
Latino/a Values Scale (LVS)				
Cultural pride	.714	1 to 4	2.90	0.49
Familism	.765	1 to 4	2.82	0.69
General Help-Seeking Questionnaire (GHSQ)	--	1 to 7	4.50	1.87
Intent to seek help from Mental Health Professional				
Acculturation Rating Scale for Mexican-	.781	1 to 5	3.83	0.82
Americans-II (ARSMA-II)	.870	1 to 5	3.62	1.01
Anglo orientation scale (AOS)				
Latino orientation scale (LOS)	.842	0 to 30	10.20	6.64
Depression symptoms (CES-D)				
CES-D Score				

Bivariate correlations. Correlations of demographic variables and main study variables were assessed using Pearson *r* coefficients for all main study variables. Visual inspection of the data indicated that no two variables exceeded the absolute value of .90, suggesting acceptable correlations between variables. Results can be found in Table 3. An examination of the correlational matrix indicated that the main outcome variable of intention to seek help was positively related with both help-seeking attitudes of expertness and stigma tolerance. With respect to the cultural orientation and the two behavioral measures of acculturation (AOS) and enculturation (LOS), findings revealed that Anglo orientation was significantly and positively associated with both

help-seeking attitudes of stigma tolerance and expertness. Anglo orientation was also significantly and negatively associated with stigma toward mental illness; therefore, higher orientation to Anglo culture (i.e., behavioral acculturation) was related to lower levels of stigma toward mental illness. Similarly, age was significantly and negatively associated with Anglo orientation, such that older participants reported lower Anglo orientation.

As expected, Latino orientation was negatively correlated with Anglo orientation. Also, Latino orientation (i.e., behavioral measure of enculturation) was significantly and positively correlated with the Latino cultural value of cultural pride. This was not surprising, as the value enculturation measure of cultural pride and Latino orientation subscale measure different dimensions of enculturation (i.e., values and behavioral, respectively). A lack of significant correlations was observed between the Latino value of *familismo* and the Latino orientation scores.

The Latino cultural values of *familismo* and cultural pride demonstrated few correlations with other study variables. The Latino value of *familismo* was significantly and positively correlated with lower levels of stigma toward mental illness and age, whereas significant and positive correlation was found between the Latino value of cultural pride and the help-seeking attitude of expertness. Finally, for the BTMI scale, significant and negative correlations between the BTMI and stigma tolerance were found. As negative beliefs about mental illness increase, so does stigma toward seeking psychological help. Last, stigma toward mental illness was significantly and positively correlated with higher depression symptoms.

Table 3

Pearson Correlations Between Enculturation, Acculturation, Depression, Attitudes toward Psychological Treatment, and Stigma toward Mental Illness

Variable	1	2	3	4	5	6	7	8	9	10
Age	-	.10	.10	-.07	-.02	-.16*	-.05	-.12	.26*	-.09
BTMI		-	-.06	-.33**	-.12	-.24**	-.03	-.12	.22**	.26**
GHSH-I			-	.18**	.39**	.08	.10	.01	-.02	-.02
BAPS-Stigma tolerance				-	.12	.18**	-.06	-.30	-.06	-.32**
BAPS-Expertness					-	.17*	.05	.14*	.06	-.09
ARSMA-II-AOS						-	-.15*	.07	-.03	.06
ARSMA-II-LOS							-	.14*	.12	-.03
LVS-Cultural-Pride								-	.23**	-.07
LVS-Familismo									-	-.17*
CES-D										-

Note: BTMI = Stigma toward Mental Illness; BAPS = Beliefs about Psychological Services; ARSMA-II-AOS = measure of behavioral acculturation; ARSMA-II-LOS –measure of behavioral enculturation; LVS = Latino Values Scale – measure of values enculturation; CES-D = Center for Epidemiologic Studies Depression scale
* $p < .05$ ** $p < .01$ *** $p < .001$.

Preliminary Analyses

In addition, mean differences on demographic variables of gender, nativity, education, and both data collection samples were also examined. As previously discussed, participants in the current study were recruited from a cultural community event and Latino social media groups. It is plausible that different sociodemographic or main study variables exist between these two data samples; therefore, independent-sample t-tests were conducted to determine whether there were significant differences in mean scores between both data collection samples (e.g., Latino community event versus Latino social media groups) for the nine main study variables. Results revealed there were significant mean differences between both data collection samples, specifically for the Latino cultural value of *familismo* (values enculturation), psychological help-seeking attitude of expertness, and behavioral acculturation and enculturation (Anglo and Latino orientations, respectively).

T-tests for both data collection samples. For the cultural value of *familismo*, homogeneity of variance was not violated, as assessed by Levene's test for equality of variances ($p = .711$). Participants recruited at the community event reported significantly greater adherence to the cultural value of *familismo* ($M = 2.97$, $SD = 0.64$) than Latinos recruited from social media groups ($M = 2.52$, $SD = 0.66$); $t(219) = 4.84$, $p = .001$. For the help-seeking attitude of expertness, homogeneity of variance was violated, Levene's statistic $= 36.61$, $p = .001$. Latino participants recruited from social media groups reported significantly higher positive attitudes about the expertness of psychologists and their services ($M = 4.72$, $SD = 0.63$) compared to Latinos recruited from the community event ($M = 4.17$, $SD = 1.17$), equal variances not assumed; $t(215.32) = -4.47$; $p = .001$. For

behavioral acculturation, homogeneity of variance was violated, Levene's statistic = 43.84, p =.005; however, homogeneity of variance was not violated for behavioral enculturation, Levene's statistic = 0.01, p = .911. Participants from the social media group sample reported significantly higher Anglo orientation (i.e., behavioral acculturation; M = 4.09, SD = 0.41) than Latinos recruited from the community event (M = 3.74, SD = 0.89), equal variances not assumed $t(218.82)$ = -4.08, p = .001. In contrast, participants from the community event (M = 3.75, SD = 0.98) reported significantly higher Latino orientation (behavioral enculturation) than participants from the social media group sample (M = 3.42, SD = 1.02), equal variances assumed; $t(219)$ = 2.28, p = .024.

Overall, results revealed significant differences between both data collection samples for several of the main study variables. Despite significant differences observed between data samples, separate analyses for each sample were not performed due to the small sample size of participants recruited online (n = 71). A sample size of 71 did not meet sample size requirements to detect significant results for regression or mediation analyses. Results from the power analysis will be discussed further. Therefore, both data collection samples were examined together as they provided greater diversity in the total sample, in addition to providing a larger sample size that allowed for increased power to test significant findings. It is important to mention that possible differences among these two samples may have introduced biased sample characteristics unique to Latino participants recruited from social media groups. Therefore, results should be interpreted with caution.

T-test for gender. Independent t-tests were performed to determine if there were differences between genders for the nine main study variables. No significant differences were found between males and females for any of the nine variables of interest. This was a surprising finding, as previous findings have found that Latina women were more to endorse positive help-seeking attitudes (Ramos-Sanchez & Atkinson, 2009), reported higher rates of depression symptoms (Camacho et al., 2015; Shattell, Smith, Quinlan-Colell, & Villalba, 2008), and greater intentions to seek mental health services (Cabassa et al., 2006) compared to Latino men.

T-tests for nativity status. Independent t-tests were also utilized to determine if there were significant differences between nativity status and the nine variables of interest. Significant differences between foreign-born Latinos and U.S.-born Latinos were found for the following variables: stigma toward mental illness, intention to seek mental health professional, and both Anglo and Latino orientations (behavioral measures of acculturation and enculturation, respectively). For stigma toward mental illness, homogeneity of variance was violated, Levene's statistic = 13.26, $p = .001$. Foreign-born Latinos ($M = 43.09$, $SD = 24.21$) endorsed significantly higher levels of stigma toward mental illness compared to U.S.-born Latinos ($M = 36.26$, $SD = 17.24$); $t(109.45) = 2.08$, $p = .04$. Similarly, foreign-born Latinos ($M = 4.92$, $SD = 1.91$) also reported significantly greater intentions to seek a mental health professional than U.S.-born Latino ($M = 4.29$, $SD = 1.79$); $t(109.45) = 2.08$, $p = .04$. With respect to cultural orientation, foreign-born Latinos ($M = 4.14$, $SD = .71$) indicated higher Latino orientation when compared with U.S.-born individuals ($M = 3.38$, $SD = 1.03$); homogeneity of variance was violated, Levene's = 12.91, $p = .001$, $t(196.68) = 6.46$, $p = .001$. In contrast, U.S.-born Latinos

indicated higher Anglo orientation when compared to foreign-born Latinos ($M = 4.09$, SD = .51); ($M = 3.35$, .98), respectively. Homogeneity of variance was also violated; Levene's test = 63.77, $p = .001$, $t(91.87) = -6.13$, $p = .001$.

ANOVA for education. A one-way analysis of variance was conducted to determine if any significant differences across levels of education emerged for the variables of interest. Years of education were collapsed into three groups for ease of interpretation (high school or less, some college, bachelor's degree or higher). This analysis revealed significant differences for endorsement of the Latino cultural value of *familismo* (value enculturation), $F(2, 218) = 4.37$, $p = .01$, BTMI $F(2, 218) = 9.36$, $p = .001$, and stigma tolerance $F(2, 218) = 2.74$, $p = .001$. The following variables also demonstrated significant differences across education; however, homogeneity of variance was violated as assessed by Levene's test. For expertness, Levene's statistic = 5.93, $p = .003$, Welch's $F(2, 141.36) = 4.23$, $p = .02$, and for Anglo orientation, Levene's statistic = 17.43, $p = .001$, Welch's $F(2, 137.57) = 9.04$, $p = .001$.

The Games-Howell post hoc test was utilized, as this test does not assume homogeneity of variances. Post hoc tests indicated that individuals who completed a high school (H.S.) degree or less reported higher adherence to the Latino cultural value of *familismo* than those who completed a bachelor's (B.A.) degree or higher. In terms of stigma toward mental illness, Latinos who completed an H.S. degree or less reported greater negative beliefs than individuals who completed some college, a B.A. degree, or higher. With respect to help-seeking attitudes, Latinos who completed a B.A. degree or higher reported more positive attitudes about the expertness of psychologists compared to individuals with fewer years of education (H.S. degree or less). For stigma tolerance,

differences were observed across all three-education groups, such that less stigma toward mental health treatment was reported among individuals with B.A. degree or higher, compared to individuals with some college and those with an H.S. degree or less. In terms of Anglo orientation, Latinos with more years of education (some college and B.A degree or greater) indicated higher Anglo orientation than Latinos who obtained fewer years of education (H.S. degree or less). As a result of these findings, nativity status and education were controlled for in the regression analyses.

Before proceeding with main study analyses, an a priori power analysis was conducted using G*Power (Faul, Erfelder, Bucnhner, & Lang, 2009) in order to determine required sample size for regression analyses. Based off the multiple hierarchical regression that was used for this study, with a medium effect size (f^2) of .15, an alpha of .05, a standard power level of .80, and a total of 7 predictors, the results of the power analysis showed that a minimum of 103 participants would be needed to achieve an appropriate power level for this study. Also, power analyses for multiple mediation analyses were conducted using recommendations made by Ma and Zeng (2014) who applied a Monte Carlo simulation to test type I error rates and statistical power needed in a multiple mediator model. Recommended sample sizes for multiple mediation models ranged from 100-500 participants depending on desired effect size. Based on their findings, for this study, a sample of at least 200 was considered enough to reach a desired power of 0.8 in order to detect significant mediating effects (Ma & Zeng, 2014).

Main Study Analyses

Hypotheses 1a–1e. To test Hypotheses 1a, 1b, 1c, 1d, and 1e, five hierarchical multiple regressions were conducted to examine whether the addition of both Latino

cultural values of *familismo* and cultural pride (i.e., values enculturation) would improve the prediction of attitudes toward psychological illness and treatment (i.e., expertness, stigma tolerance, and stigma toward mental illness), help-seeking intention, and depression symptoms, above and beyond that of behavioral acculturation and enculturation and demographic variables. The dependent variables of interest were: (1a) beliefs about expertness, (1b) stigma tolerance, (1c) stigma toward mental illness, (1d) and intentions to seek therapy, and (1e) depression symptoms. For each separate hierarchical regression, demographic variables of nativity status and years of education were entered in Model 1 in order to control for the variance accounted for by these demographic variables. The demographic variable of "years of education" was a categorical variable with three categories. In order to use this variable in the model, dummy variables for education were created to represent the original categories. These two dummy variables for education were H.S. or less and some college, and a B.A. degree or higher was used as a reference category. In Model 2, both the AOS and the LOS scales were entered as measures of the behavioral dimension of acculturation and enculturation, respectively. Finally, in Model 3, the two measures of values enculturation; Latino cultural values (LVS-Cultural Pride and LVS- Familismo) were entered; both of these cultural values represented separate dimensions of values enculturation and were hypothesized to contribute to variance in predicting the dependent variables.

Hypothesis 1a. The first hypothesis predicted that the Latino cultural values would contribute a significant amount of variance in predicting positive attitudes of expertness, above and beyond the variability accounted for by behavioral acculturation and enculturation and demographic variables. See Table 4 for full details on each regression

model. In Model 1, age, nativity status, and education generated, $R^2 = .05$, $F(4,212) = 2.74$, $p < .03$. In Model 2, the addition of the behavioral measures of acculturation and enculturation (LOS and AOS) was $R^2 = .07$, $F(6,210) = 2.80$, $p < .01$. This 2.5% change variance in Model 2 was not significant (F change = 2.74, p < .06). For Model 3, with the addition of the two Latino cultural values of enculturation (LVS-Familismo and LVS-Cultural Pride), the full model was statistically significant, $R^2 = .08$, $F(8,208) = 2.37$, $p < .02$. However, the addition of the two cultural values did not lead to significant increase in R^2 of .01, $F(2, 208) = 1.08$, $p = .34$. In the final model, with all predictors in the model, education and Anglo orientation were the only significant contributors. Because neither of the two cultural values added to the prediction of expertness, the original hypothesis was not supported.

Table 4

Hierarchical Regression Analyses Predicting Expertness (n = 219)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
Age	.01	.01	.01	.01	.01	.03	.01	.01	.02
Nativity	-.03	.16	-.02	-.11	.18	-.05	-.11	.18	-.05
Education – HS or less	-.59	.18	-.26***	-.49	.18	-.22**	-.50	.19	-.22**
Education – Some college	-.33	.17	-.15	-.33	.17	-.15	-.33	.17	-.15
Behavioral Acculturation (Anglo Orientation)				.23	.11	.17*	.22	.10	.16*
Behavioral Enculturation (Latino Orientation)				.07	.07	.07	.06	.08	.05
Values Enculturation (Familismo)							.10	.11	.06
Values Enculturation (Cultural Pride)							.14	.16	.06
R^2		.05*			.07**			.08*	
F for Change in R^2		.05*			.03			.01	

* $p < .05$ ** $p < .01$ *** $p < .001$

Hypothesis 1b. In the second hierarchical regression predicting stigma tolerance, it was hypothesized that the Latino cultural values of cultural pride and *familismo* would significantly and negatively predict stigma tolerance above and beyond the variability accounted for by behavioral enculturation, behavioral acculturation, and demographic variables. In Model 1, age, nativity, and education were entered, accounting for 15% of the variance in predicting stigma tolerance, $F (4, 212) = 9.46$, $p < .001$. In Model 2, the addition of the behavioral measures of acculturation and enculturation (AOS and LOS) resulted in $F(6, 210) = 6.96$, $p < .001$, but the change in variance was not significant (F change $= 1.83$, $p = .16$). In Model 3, both Latino cultural values (*familismo* and cultural pride) were entered, $R^2 = .17$, $F (8, 208) = 5.50$, $p < .001$. However, the addition of both Latino cultural values did not contribute to variance in predicting stigma tolerance, $\Delta F (2, 208) = .1.09$, $p = .34$. See Table 5 for full details on each regression model. Contrary to predictions that the addition of the two cultural values would significantly predict stigma tolerance above and beyond measures of acculturation and enculturation and demographic variables, these findings did not support the hypothesis. With all predictors in the model, only education was demonstrated to be a significant contributor of variance to stigma tolerance, where higher education was associated with greater tolerance toward stigma beliefs about mental health treatment.

Table 5

Hierarchical Regression Analyses Predicting Stigma Tolerance (n = 219)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
Age	-.01	.01	-.02	-.01	.01	-.03	-.01	.01	-.05
Nativity	.02	.13	.01	-.12	.15	-.06	-.11	.15	-.06
Education – HS or less	-.90	.15	-.45***	-.84	.16	-.42***	-.90	.16	-.45***
Education – some college	-.42	.14	-.21**	-.42	.14	-.21**	-.45	.15	-.23***
Behavioral Acculturation (Anglo Orientation)				.14	.09	.11	.14	.09	.11
Behavioral Enculturation (Latino Orientation)				-.07	.06	-.07	-.06	.06	-.07
Values Enculturation (Familismo)							.08	.10	.06
Values Enculturation (Cultural Pride)							-.19	.13	-.09
R^2		.15***			.17***			.18***	
F for Change in R^2		.15***			.02			.01	

* $p < .05$ ** $p < .01$ *** $p < .001$

Hypothesis 1c. In the third hierarchical regression that predicted stigma toward mental illness, it was hypothesized that the Latino cultural values of cultural pride and *familismo* would significantly and positively predict stigma toward about mental illness. The addition of Latino cultural values was expected to improve the prediction over and above the variability accounted for by behavioral enculturation and behavioral acculturation as well as demographic variables. Therefore, age, nativity, and education were entered in Model 1, contributing significantly to the variance in stigma toward mental illness, $R^2 = .10$; $F(4, 212) = 6.03$, $p < .001$. In Model 2, with the addition of the behavioral measures of acculturation, the model was statistically significant, $R^2 = .13$; $F(6, 216) = 5.14$, $p < .001$. The addition of acculturation and enculturation also led to a statistically significant increase in R^2 of .03, $F(2, 210) = 3.12$, $p < .05$. In Model 3, the addition of both Latino cultural values showed a significant increase of 4.2% in the variance; this change in R^2 was significant, $F(2, 208) = 5.28$, $p < .005$. With all predictors included in the final model, fewer years of education (H.S. degree or less), lower Anglo orientation (i.e., behavioral acculturation), and greater adherence to enculturation value of *familismo* were all significant predictors of beliefs toward mental illness. Overall, results provided support for hypothesis 1c. Latino cultural values significantly and positively predicted stigma toward mental illness, even after controlling for covariates of behavioral acculturation and enculturation and demographic variables. See Table 6 for full details on each regression model.

Table 6

Hierarchical Regression Analyses Predicting Stigma toward Mental Illness Model (n =

219)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
Age	.05	.09	.03	.03	09	.02	-.06	.10	-.18
Nativity	-4.13	2.96	-.10	-2.71	3.36	-.06	-2.57	3.46	-.20
Education – HS or less	13.04	3.36	.30***	11.20	3.42	.26***	8.53	3.46	.20*
Education – some college	2.67	3.18	.06	2.79	3.15	.07	1.40	3.13	.03
Behavioral Acculturation (Anglo Orientation)				-4.51	1.97	-.17*	-4.80	1.94	-.18*
Behavioral Enculturation (Latino Orientation)				-1.48	1.40	-.07	-1.62	1.39	-.08
Values Enculturation (Familismo)							6.52	2.08	.22**
Values Enculturation (Cultural Pride)							-4.93	2.88	-.12
R^2		.10***			.13***			.17***	
F for Change in R^2		.10***			.03*			.04**	

* p < .05 ** p < .01 *** p < .001

Hypothesis 1d. The fourth hierarchical regression model predicted intentions to seek help from a mental health professional. It was hypothesized the Latino cultural values of cultural pride and/or *familismo* would contribute to the prediction of help-seeking intention, above and beyond behavioral measures of acculturation, enculturation, and demographic variables. In Model 1, entering demographic variables of age, nativity, and education did not contribute significant variance to the model predicting help-seeking intentions, $R^2 = 04$, $F(4, 210) = 2.20$, $p = .07$. In Model 2, the addition of behavioral measures of acculturation and enculturation improved the model, $R^2 = .07$; $F(6, 216) = 2.51$, $p < .02$, accounting for an additional 2.7% of the variance in help-seeking intention. The addition of the behavioral measures of enculturation and acculturation almost approached significance, $\Delta F (2, 208) = 3.05$, $p = .05$. In Model 3, with the addition of both Latino cultural values (cultural pride and *familismo*) to the model, minimal variance was added to the model, $R^2 = .07$; $F(8, 206) = 2.01$, $p < .05$. This addition, however was not statistically significant, $\Delta F(2, 206) = .56$, $p = .57$. In the final model, with all predictors present, only nativity status and behavioral acculturation uniquely contributed significant variance to the prediction of help-seeking intentions. Findings suggested that foreign-born participants and individuals with higher Anglo orientation improved the prediction of greater intentions to seek help from mental health professionals within the current sample. Full results are shown in Table 7. This analysis did not support hypothesis 1c, given that value enculturation did not contribute significant variance in predicting intent.

Table 7

Hierarchical Regression Analyses Predicting Help-seeking Intent Model (n = 219)

Variable	Model 1			Model 2			Model 3		
	B	$SE\ B$	β	B	$SE\ B$	β	B	$SE\ B$	β
Age	.01	.01	.06	.01	.01	.08	.01	.01	.09
Nativity	-.67	.28	.17[*]	-.82	.32	-.21[**]	-.81	.32	-.21[**]
Education – HS or less	-.42	.32	-.11	-.25	.32	-.06	-.20	.34	-.05
Education – some college	-.28	.30	-.07	-.29	.30	-.08	-.28	.30	-.07
Behavioral Acculturation (Anglo Orientation)				.43	.18	.18[*]	.45	.19	.19[*]
Behavioral Enculturation (Latino Orientation)				.12	.13	.07	.14	.14	.08
Values Enculturation (Familismo)							-.19	.20	-.07
Values Enculturation (Cultural Pride)							-.05	.27	-.01
R^2		.04			.07[*]			.07[*]	
F for Change in R^2		.04			.03			.01	

[*] $p < .05$. [**] $p < .01$. [***] $p < .001$

Hypothesis 1e. In the fifth hierarchical regression predicting depression symptoms, it was hypothesized that the two Latino cultural values of cultural pride and *familismo*, would uniquely predict depression symptoms, above and beyond the variance accounted for by the behavioral measures of acculturation/enculturation and demographic variables. In Model 1, the demographic variables of age, nativity status, and education were added, accounting for 2.9% of the variance in predicting depression symptoms. Factors entered at step one did not contribute a significant amount of variance to the model, $F(4, 212) = 1.56$, $p = .19$. In Model 2, the behavioral measures of acculturation and enculturation were added, $R^2 = .04$; $F(6, 210) = 1.28$, $p = .27$. Both behavioral measures of acculturation and enculturation contributed an additional 0.7% of the variance in depression symptoms; however, this addition was not significant $\Delta F(2, 210) = .72$, $p = .49$. In Model 3, both cultural Latino cultural values were added to the overall model predicting depression symptoms, $R^2 = .06$; $F(8, 208) = 1.64$, $p = .12$. The addition of the Latino cultural values did not add significant variance in the prediction of depression symptoms, $\Delta R^2 = 02$; $\Delta F (2, 208) = 2.68$, $p = .07$. However, with all the predictors in the model, education and *familismo* uniquely contributed to the prediction of depression symptoms, such that fewer years of education (H.S. degree or less) were associated with greater depression symptoms and a stronger adherence to the Latino value of *familismo* was associated with lower depression symptoms. Findings did not support the hypothesis that Latino cultural values would significantly contribute variance to the model, after controlling for covariate variables (i.e., behavioral enculturation and acculturation and demographic variables). See Table 8 for full results.

Table 8

Hierarchical Regression Analyses Predicting Depressive Symptoms Model (n = 219)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
Age	-.05	.03	-.11	-.05	.03	-.11	-.03	.03	-.08
Nativity	.53	1.00	.04	-.03	1.15	.18	-.03	1.14	-.01
Education – HS or less	2.24	1.13	.16	2.55	1.17	.18*	2.99	1.19	.21*
Education – some college	.68	1.07	.05	.67	1.08	.05	.83	1.08	.06
Behavioral Acculturation (Anglo Orientation)				.79	.67	.09	.90	.67	.10
Behavioral Enculturation (Latino Orientation)				-.11	.48	-.02	.01	.48	.01
Values Enculturation (Familismo)							-1.56	.72	-.16*
Values Enculturation (Cultural Pride)							-.14	.99	-.01
R^2		.03			.04			.06	
F for Change in R^2		.03			.01			.02	

*$p < .05$ **$p < .01$ ***$p < .001$

Mediation and Moderation Analyses

All mediation and moderated mediation analyses were conducted using a bias-corrected bootstrap approach for the parallel multiple mediation and moderated mediation models (see Figure 2; Hayes, 2013). To test the relationship between value enculturation and intention to seek help, as mediated by stigma tolerance, expertness, and stigma toward mental illness, the PROCESS macro (version 3.0, 2018) for SPSS was utilized to calculate both direct and indirect effects for the mediation models. Two multiple mediation models were tested (See Figure 1). Multiple mediation models hold several advantages over using several simple mediation analyses. For example, in addition to testing the indirect effect of each mediator, this statistical approach also allowed for an examination of the relationship between the predictor variable and outcome variable through the set of all the mediators to obtain the total indirect effect. Multiple mediation models also allow for the ability to contrast and compare the specific indirect effect of one mediation to another indirect effect. The fundamental parts of a multiple mediation model are illustrated in Figure 2. They include estimates of the direct effect (c') of a predictor variable (X) on an outcome variable (Y), holding the mediators (M_1, M_2, and M_3) constant. The indirect effect of a predictor variable on an outcome variable through a mediator is the product of the a and b paths (Hayes, 2013). The PROCESS macro generates confidence intervals for each effect, where the significance of the effect is determined by the presence of zero within the confidence interval. Significance is observed when the confidence interval does not contain zero ($p < .05$; Vazsonyi et al., 2015).
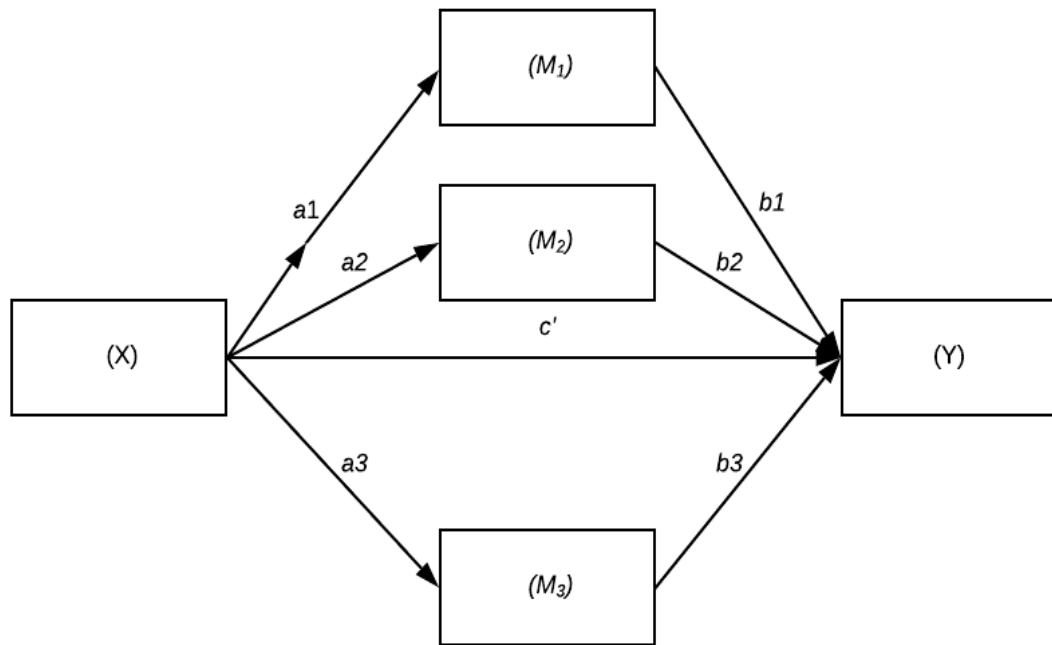
Figure 2. Conceptual Model for Parallel Multiple Mediation and Corresponding Pathways. Note: X = Independent Variable, M_1-M_3 = Mediator(s), Y = Dependent Variable, a path = effect of X on M, b path = effect of M on Y, while holding X constant, ab = indirect effect of X on Y through M, c' = estimates the direct effect of X on Y holding M constant, c = total effect of X on Y, in other words c' + ab.

While there are several approaches for examining the indirect effect, research has demonstrated one of the most robust approaches to estimating indirect effects is the bias-corrected bootstrap approach (Fritz & MacKinnon, 2007; Hayes, 2012). The bootstrapping procedure is part of a class of procedures that utilize resampling methods. With this approach, the original study sample size (*n*) is thought to represent the larger population from which it was drawn. Observations from the original sample are resampled with 10,000 samples, generating an empirically derived representation of the sampling distribution for the indirect effect. This representation is also utilized to develop

95% confidence intervals for the indirect effects. Indirect effects are considered to be statistically significant at $p < .05$, when the confidence intervals do not include the value of zero (Hayes, 2013, 2018). Based on previous research, bias-correct bootstrapping is a nonparametric resampling procedure that avoids the assumption of normality of the data distribution, while also controlling for Type 1 errors (Preacher & Hayes, 2008).

Multiple mediation analyses. To test the hypothesized research models (see Figures 2 and 3), two separate multiple mediation models were conducted. The first multiple mediation model tested the indirect effects of three individual mediators (stigma tolerance, expertness, and stigma toward mental illness) on the relationship between the Latino value of cultural pride (i.e., values enculturation) and help-seeking intentions. The second multiple mediation was like the first, except indirect effects of the multiple mediations were tested on the relationship between the Latino value of *familismo* (i.e., value enculturation) and help-seeking intentions. Bootstrapping estimates of indirect effects utilized 5,000 samples which were generated for each analysis, as recommended by Preacher and Hayes (2008). Also, significant indirect effects were observed using 95% confidence intervals that did not include zero in their lower or upper bounds.

Hypothesis 2a-2c. As presented in Table 9, results of the multiple mediator analysis revealed that the overall model was not statistically significant, $R^2 = .003$, $F(1, 218) = .07$, $p = .79$. An examination of the specific indirect effects indicated that the specific indirect effect the Latino value of cultural pride significantly predicted positive attitudes of expertness, $t = 2.16$, $p < .05$, which, in turn, was significantly related to greater intentions to seek psychological services $t = 5.23$, $p < .001$ (see Figure 3). A 95% confidence interval based on 10,000 bootstrap samples indicated that the indirect effect

through expertness, holding all other mediator's constant, was statistically significant (index = .20; 95% CI = .02, .43). Therefore hypothesis (2a) that expertness would significantly mediate the relationship between Latino cultural pride and help-seeking intentions was supported since its 95% CI does not contain zero.

Latino cultural pride did not significantly predict stigma tolerance $t = -.32$, $p = .75$; however, greater stigma tolerance did significantly predict greater intentions to seek help, $t = 2.09$, $p < .05$. These results indicated that the indirect effect through stigma tolerance on the value of cultural pride to intentions to seek help was not significant (index = -.01; 95% CI -.12, .07). Therefore, the hypothesis 2b was not supported, as stigma tolerance did not significantly mediate the relationship between Latino cultural pride and help-seeking intentions.

The Latino value of cultural pride did not significantly predict stigma toward mental illness, $t = -1.59$, $p = .11$, and stigma toward mental illness did not predict intention, $t = .49$, $p = .62$. These results indicated that the indirect effect of stigma toward mental illness was not significant (index = -.02; 95% CI -.01, .04); see Figure 3). Therefore, hypothesis 2c was not supported, as stigma toward mental illness did not significantly mediate the relationship between Latino cultural pride and help-seeking intentions.

Altogether, with all three mediators in the model, direct effect of the Latino value of cultural pride to intent to seek help was not statistically significant $t = .26$, $p = .79$. Further, only the belief in psychologists' expertise had a significant indirect effect on the relationship between cultural pride and intentions to seek help.
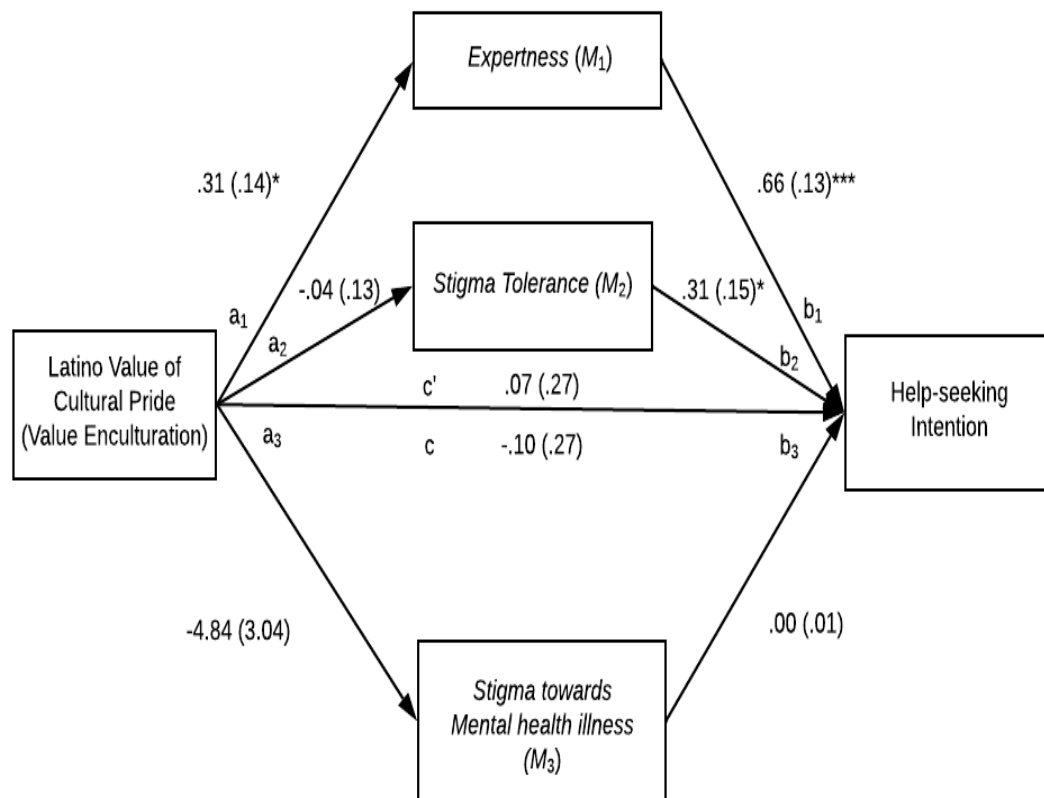
Figure 3. Multiple Mediation Model of the Indirect Effect of Latino Value of Cultural Pride on Intention through Attitudes of Expertness, and Stigma Tolerance, and Stigma toward Mental Illness. Note: Unstandardized Beta coefficient values are provided for each pathway. Standard error values are provided in parentheses. Total Effect of X on Y is provided above the line and denoted by (c'); whereas the direct effect of X on Y after accounting for the indirect effects of Stigma tolerance, stigma toward mental illness, and expertness, is denoted by number below the line (c).
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 9

Indirect Effects, Tests of Mediation, Boot Strapping Estimates, 95% Confidence Intervals for Multiple Mediation Model on the Relationship between Latino Cultural Pride and Intent to Seek Help

Indirect effect	Bootstrap indirect effect/ index	SE	Bootstrap 95% CI	
			Lower Bound	Upper Bound
Expertness	.20	.11	.02	.43
Stigma Tolerance	-.01	.05	-.12	.07
Stigma toward mental illness	-.02	.04	-.01	.04

*$p < .05$. ** $p < .01$. *** $p < .00$

Hypothesis 3. For the second parallel multiple mediation model, as shown in Table 10, the multiple mediation's effects on the relationship between Latino value of *familismo* and intent were examined. An examination of specific indirect effects for stigma tolerance, expertness, and stigma toward mental illness indicated no significant findings. See Table 10 for full results.

The Latino value of *familismo* did not significantly predict expertness, $t = .81$ $p = .42$; however, expertness did significantly predict intentions to seek psychological services, $t = 5.18$, $p < .001$ (see Figure 4). Using a bootstrap estimation approach with 10,000 samples, results for the indirect effect of the Latino value of *familismo* on intent via expertness was not statistically significant (index = .06; 95% CI -.07, .23). The hypothesis (3a) that expertness would significantly mediate the relationship between

Latino cultural pride and help-seeking intentions was not supported.

The Latino value of *familismo* did not significantly predict stigma tolerance, $t = -.81$ $p = .53$; however, stigma tolerance was a significant predictor of intention to seek help, $t = 2.13$ $p < .05$. Results indicated that the indirect effect of stigma tolerance on *familismo* to help-seeking intentions was not significant (index = -.02; 95% CI -.11, .05). Therefore, hypothesis 3b was not supported, as stigma tolerance did not significantly mediate the relationship between Latino value of *familismo* and help-seeking intentions.

The Latino value of *familismo* significantly predicted greater stigma toward mental illness, $t = 2.80$, $p < .01$, however, greater stigma toward mental illness did not significantly predict help-seeking intention, $t = .63$, $p = .52$. Results indicated that the indirect effect through stigma towards mental illness on the value of *familismo* to help-seeking intentions was not significant, (*index* = .02, 95% CI [-.06, .12]; see Figure 4). Therefore, hypothesis 3c was not supported, as stigma toward mental illness did not significantly mediate the relationship between Latino value of *familismo* and help-seeking intentions.

Altogether, with all three mediators in the model, the direct effect of the Latino value of *familismo* on intent was not significant, $R^2 = .01$, $F (1, 218) = .01$ $p = .91$. Moreover, the indirect through stigma tolerance, expertness, and stigma toward mental illness were not statistically significant. Therefore, hypothesis 3 was not supported as none of the three mediators were found to significantly mediate the relationship between Latino value of *familismo* and intent to seek help.

Table 10

Indirect Effects, Tests of Mediation, Boot Strapping Estimates, 95% Confidence Intervals for Multiple Mediation Model on the Relationship between Latino value of Familismo and Intent to Seek Help

			Bootstrap 95% CI	
Indirect effect	Bootstrap indirect effect/index	*SE*	Lower Bound	Upper Bound
Expertness	.06	.07	-.07	.23
Stigma Tolerance	-.02	.04	-.11	.05
Stigma toward mental illness	.02	.10	-.06	.12

* $p < .05.$ ** $p < .01.$ *** $p < .001.$
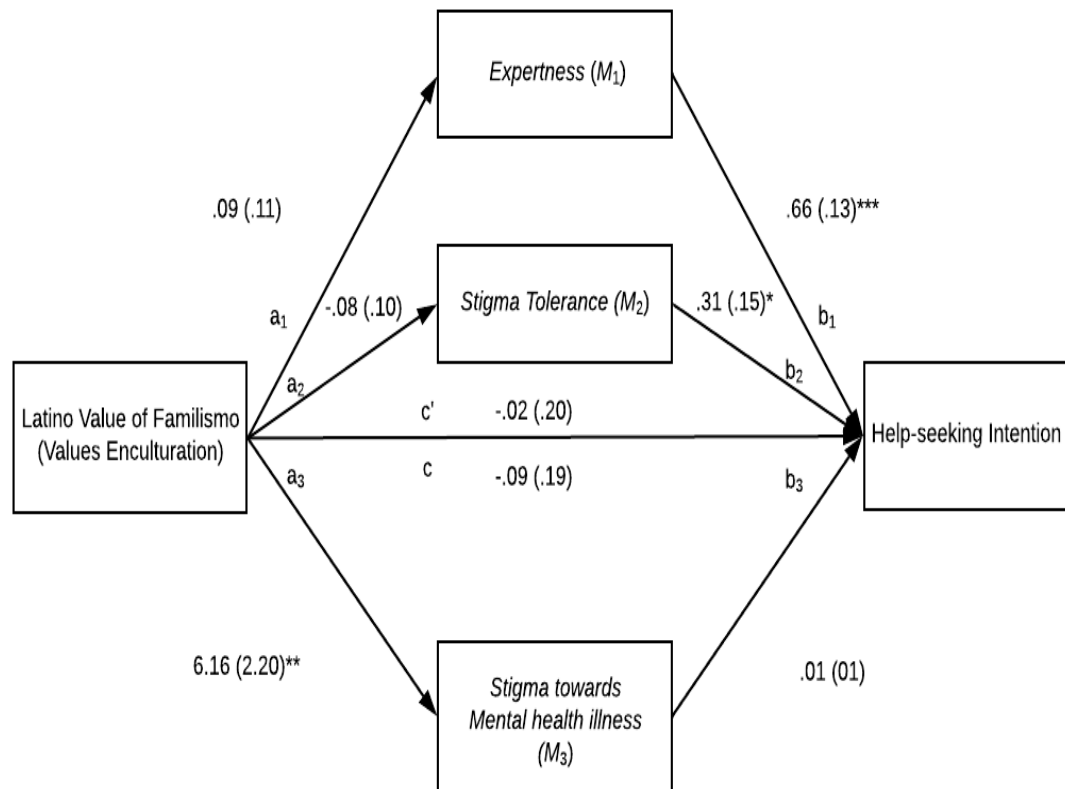
Figure 4. Multiple Mediation Model of the Indirect Effect of Latino Value of Familismo on Intention through Attitudes of Expertness, and Stigma Tolerance, and Stigma toward Mental Illness. Unstandardized Beta coefficient values are provided for each pathway. Standard error values are provided in parentheses. Total Effect of X on Y is provided above the line and denoted by (c'); whereas the direct effect of X on Y after accounting for the indirect effects of Stigma tolerance, stigma toward mental illness, and expertness, is denoted by number below the line (c).

$^{*} p < .05.$ $^{**} p < .01.$ $^{***} p < .001.$

Hypothesis 4. In order to test hypothesis 4, three separate moderated meditational models were tested to examine the indirect effects of expertness; stigma tolerance, and BTMI on the relationship between cultural pride and intent to seek services, while also investigating the conditional indirect effects of depression on the predictor-mediator pathway. For ease of interpretation, please see Figure 5 for the conceptual model and Table 11 for full results. Hypotheses 4a-4c investigated the relationship between the Latino value of cultural pride and intention to seek mental health services. Visual representations of these three moderated mediation models are listed in Figure 5. This analysis was performed again using PROCESS 3.0 (Hayes, 2018).

Hypothesis 4a-4c. The hypothesis that the construct of expertness would mediate the relationship between Latino cultural pride and intention to seek psychological help, with depression moderating the value of cultural pride and expertness, was not supported (See Table 11). As can be seen in Table 11, the results revealed that Latino cultural pride significantly predicted expertness, which, in turn, significantly predicted intent (overall model $R^2 = .15$, $F[2, 217] = 15.66$, $p < .001$). However, the effect of the interaction of cultural pride and depression on expertness was not statistically significant. The conditional indirect effect was tested using a bootstrap estimation approach with 10,000 samples. These results indicated that nonsignificant conditional indirect effects exist (index = .0046, $SE = .01$, 95% CI = -.01, .03). Therefore, hypothesis 4a was not supported.

The second analysis examined the ability of stigma tolerance to mediate the relationship between the Latino value of cultural pride and intent, with depression moderating cultural pride and stigma tolerance. The results revealed that Latino cultural

pride did not significantly predict stigma tolerance; however, stigma tolerance did significantly predict intention. Also, Latino cultural pride did not significantly predict intent and the overall model was significant, $R^2 = .04$, $F(2, 217) = 3.56$, $p < .05$. The effect of the interaction of cultural pride and depression on stigma tolerance was not statistically significant. The conditional indirect effect was tested using a bootstrap estimation approach with 10,000 samples. These results indicated that nonsignificant conditional indirect effects exist (index = .0076, $SE = .01$, 95% CI = -.01, .03). Therefore, hypothesis 4b, which predicted that stigma tolerance mediates the relationship between Latino cultural pride and intent, and that this indirect effect is moderated by depression, was not supported.

The third analysis examined the ability of stigma toward mental illness to mediate the relationship between values enculturation and intent, with depression moderating Latino cultural values and stigma toward mental illness. The results revealed that Latino cultural pride did not significantly predict stigma toward mental illness, and in turn, stigma toward mental illness did not significantly predict intention. Latino cultural pride did not significantly predict intent and overall this model was not significant, $R^2 = .03$, $F(2, 217) = .34$, $p = .68$. The effect of the interaction of cultural pride and depression on stigma toward mental illness was also not statistically significant. The conditional indirect effect was tested using a bootstrap estimation approach with 10,000 samples. These results indicated that non-significant conditional indirect effects exist (index = -.01, $SE = .01$, 95% CI = -.01, .01). Therefore, hypothesis 4c, which predicted that stigma toward mental illness mediates the relationship between Latino cultural pride and intent,

and that this indirect effect is moderated by depression, was not supported. Overall, none

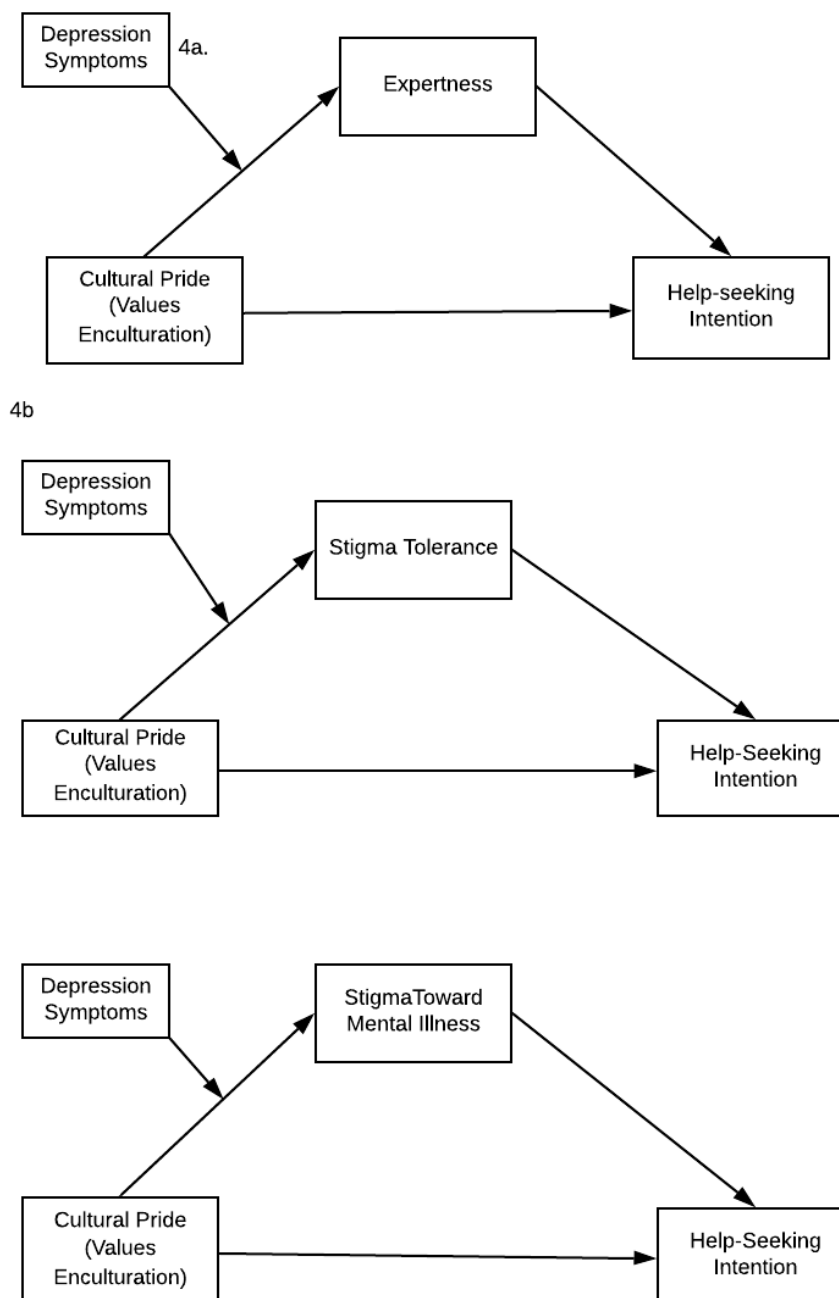of the specified predictions for hypothesis 4 were supported.

Figure 5. Conceptual Model: Moderated Mediation Model Testing Hypothesis 4. Proposed Model. Note: 4a: Expertness Hypothesis; 4b: Stigma Tolerance Hypothesis; 4c: Stigma Toward Mental Illness Hypothesis.

Table 11

Moderated Mediation Analysis Testing Depression as a Moderator of the Relationship between Latino Value of Cultural Pride and Help-seeking Intent

	B	SE B	t	Boot indirect effect	Boot SE	95% CI
				Index of Moderated Mediation		
Mediator – Expertness						
$R^2 = .03$, $F(3, 216) = 1.91$, $p = .13$						
Predictor: Cultural pride	.30	.14	2.12*			
Moderator: Depression symptoms	-.02	.01	-1.34			
Interaction: Cultural pride X Depression symptoms	.01	.02	.32			
Outcome – Help-seeking Intent						
$R^2 = .15$, $F(2, 217) = 15.66$, $p < .001$	.68	.12				
Mediator: Expertness	-.14	.26	5.59***	.01	.01	-.01, .03
Predictor: Cultural Pride			-.54			
Mediator – Stigma Tolerance						
$R^2 = .11$, $F(3, 216) = 8.47$, $p < .001$						
Predictor: Cultural pride	-.07	.13	-.53			
Moderator: Depression symptoms	-.05	.01	-4.95***			
Interaction: Cultural pride X Depression symptoms	.02	.02	1.05			
Outcome – Help-seeking Intent						
$R^2 = .04$, $F(2, 217) = 3.56$, $p < .05$	.38	.15	2.62**			
Mediator: Stigma tolerance	.09	.27	.32	.01	.01	-.01, .03
Predictor: Cultural pride						
Mediator – Stigma toward mental illness						
$R^2 = .07$, $F(3, 216) = 4.58$, $p < .01$						
Predictor: Cultural pride	-4.73	3.03	-1.56			
Moderator: Depression symptoms	.75	.21	3.48**			
Interaction: Cultural pride X Depression symptoms	-.43	.47	-.36			
Outcome – Help-seeking Intent						
$R^2 = .03$, $F(2, 217) = 15.47$, $p = ns$	-.01	.01	-.77			
Mediator: Stigma toward mental illness	.04	.27	.16	-.01	.01	-.01, .01
Predictor: Cultural Pride						

* $p < .05$. ** $p < .01$. *** $p < .001$.

Hypothesis 5. In order to test hypothesis 5, three separate moderated meditational models were tested to examine the indirect effects of expertness, stigma tolerance, and BTMI on the relationship between *familismo* and intent to seek services, while also investigating the conditional indirect effects of depression on the predictor-mediator pathway. For ease of interpretation, please see Figure 6 for the conceptual model and Table 12 for full results. Hypotheses 5a-5c investigated the relationship between the Latino value of *familismo* and intention to seek mental health services. Visual representations of these three moderated mediation models are listed in Figure 6. This analysis was performed again using PROCESS 3.0 (Hayes, 2018).

Hypothesis 5a-5c. Results for the hypothesis that the construct of expertness would mediate the relationship between Latino value of *familismo* and intention to seek psychological help, with depression moderating the value of cultural pride and expertness, was not supported. As can be seen in Table 12, the results revealed that *familismo* did not significantly predict expertness; however, expertness did significantly predict intent. The Latino value of *familismo* did not significantly predict intent and the overall model was significant, $R^2 = .15$, $F(2, 217) = 3.43$, $p < .05$. Moreover, the effect of the interaction of *familismo* and depression on expertness was not statistically significant. The conditional indirect effect was tested using a bootstrap estimation approach with 10,000 samples. These results also indicated that nonsignificant conditional indirect effects exist (index = .01, $SE = .01$, 95% CI = -.03, .02). Therefore hypothesis (4a) was not supported.

The second analysis examined the ability of stigma tolerance to mediate the relationship between values Latino value of *familismo* and intent, with depression

moderating *familismo* and stigma tolerance. The results revealed that *familismo* did not

significantly predicted stigma tolerance; however, stigma tolerance did significantly

predict intention. *Familismo* did not significantly predict intent and the overall model was

significant, $R^2 = .04$, $F(2, 217) = 3.43$, $p < .05$. The effect of the interaction of *familismo*

and depression on stigma tolerance was not statistically significant. The conditional

indirect effect was tested using a bootstrap estimation approach with 10,000 samples.

These results also indicated that nonsignificant conditional indirect effects exist (index =

-.01, $SE = .01$, 95% CI = -.02, .01). Therefore, hypothesis 4b, which predicted that stigma

tolerance mediates the relationship between *familismo* and intent, and that this indirect

effect is moderated by depression, was not supported.

The third analysis examined the ability of stigma toward mental illness to mediate

the relationship between *familismo* and intent, with depression moderating *familismo* and

stigma toward mental illness. The results revealed that *familismo* significantly predicted

stigma toward mental illness, and in turn, stigma toward mental illness did not

significantly predict intention. *Familismo* also did not significantly predict intent and the

overall model was not significant, $R^2 = .01$ $F(2, 217) = .33$, $p = .73$. The effect of the

interaction of *familismo* and depression on stigma toward mental illness was also not

statistically significant. The conditional indirect effect was tested using a bootstrap

estimation approach with 10,000 samples. These results indicated that non-significant

conditional indirect effects exist (index =- .01, $SE = .01$, 95% CI = -.01, .01). Therefore,

the model predicting that stigma toward mental illness mediates the relationship between

familismo and intent, and that this indirect effect is moderated by depression, was not

supported. Overall, none of the specified predictions for hypothesis 5 were supported.
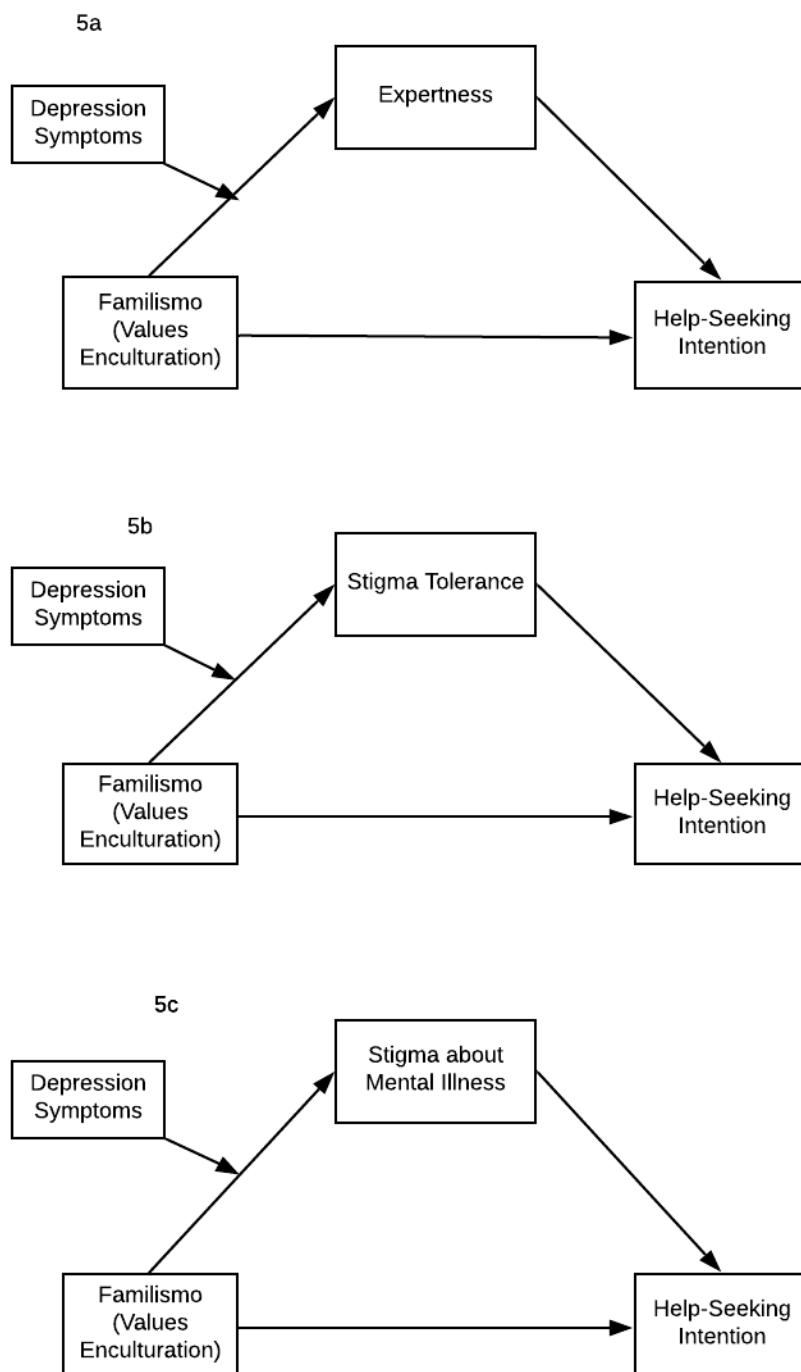
Figure 6. Conceptual Model: Moderated Mediation Model Testing Hypothesis 5. Proposed model. Note: 5a: Expertness Hypothesis; 5b: Stigma Tolerance Hypothesis; 5c: Stigma Toward Mental Illness Hypothesis.

Table 12

Moderated Mediation Analysis Testing Depression as a Moderator of the Relationship between Latino Value of Familismo and Help-seeking Intent

	B	*SE* B	*t*	Boot indirect effect	Boot *SE*	95% CI
				Index of Moderated Mediation		
Mediator – Expertness						
$R^2 = .01$, $F(3, 216) = .83$, $p = $ ns						
Predictor: Familismo	.08	.12	.72			
Moderator: Depression symptoms	-.02	.01	-1.34			
Interaction: Familismo X Depression symptoms	-.01	.02	-.70			
Outcome – Help-seeking Intent						
$R^2 = .15$, $F(2, 217) = 15.48$, $p < .001$	.68	.12	5.56***			
Mediator: Expertness	-.09	.18	-.47	-.01	.01	-.03, .02
Predictor: Familismo						
Mediator – Stigma Tolerance						
$R^2 = .12$, $F(3, 216) = 9.92$, $p < .001$						
Predictor: Familismo	-.13	.10	-1.26			
Moderator: Depression symptoms	-.05	.01	-5.34***			
Interaction: Familismo X Depression symptoms	-.01	.02	-.58			
Outcome – Help-seeking Intent						
$R^2 = .04$, $F(2, 217) = 3.43$, $p < .05$	.38	.15	2.62**			
Mediator: Stigma tolerance	.01	.19	.01	-.01	.01	-.02, .01
Predictor: Familismo						
Mediator – Stigma toward mental illness						
$R^2 = .13$, $F(3, 216) = 10.16$, $p < .001$						
Predictor: Familismo	7.51	2.14	3.51***			
Moderator: Depression symptoms	.89	.21	4.27***			
Interaction: Familismo X Depression symptoms	.06	.34	.19			
Outcome – Help-seeking Intent						
$R^2 = .01$, $F(2, 217) = .33$, $p = $ ns	-.01	.01	-.78			
Mediator: Stigma toward mental illness	.01	.21	.06	-.01	.01	-.01, .01
Predictor: Familismo						

*$p < .05$. **$p < .01$. ***$p < .001$.

CHAPTER V

DISCUSSION

The present study explored the relationship of enculturation on attitudes toward psychological treatment, stigma toward mental illness, and help-seeking intentions among Latino adults. The first aim of this study was to examine whether values enculturation (i.e., cultural pride and *familismo* would be stronger predictors of positive and negative beliefs about psychological treatment and mental illness, compared to behavioral measures of enculturation and behavioral acculturation. The second aim of this study was to explore whether psychological help-seeking attitudes (i.e., stigma tolerance and expertness of psychologist) and stigma toward mental illness would mediate the relationship between Latino cultural values and intention of seeking mental health services. Moreover, it was predicted that level of depressive symptoms might moderate the relationship between enculturation and intention to seek services via attitudes of help-seeking and stigma toward mental illness for Latino adults. Therefore, hypotheses 1a-1e sought to address aim 1, while hypotheses 2, 3, and 4 addressed the second aim of the study.

As previously discussed, a distinct research limitation within the multicultural literature is that measures of acculturation and enculturation focus on the behavioral dimensions of these constructs (e.g., language use, ethnic interactions, food preferences), which fail to capture the emotional and cognitive components (e.g., values, knowledge, identity). The present researcher examined not only the behavioral dimensions of acculturation and enculturation, but also the values dimension. The construct of values enculturation was examined by using the two Latino cultural values of *familismo* and

cultural pride, which have been found to be important cultural values among Latino individuals.

It is important to examine the unique impact that Latino cultural values (i.e., cultural pride and *familismo*) may have on perceptions of the expertness of psychologists, stigma related to treatment seeking, and stigma toward mental illness in relation to intentions to seek services. It is believed that gaining a better understanding of how culture, specifically one's adherence to traditional cultural beliefs and values (e.g., within the context of the mediators), might be relevant when examining Latinos' decisions to seek professional mental health services.

Relationships among Values Enculturation, Attitudes about Psychological Treatment, and Stigma toward Mental Illness

Expertness. Hypothesis 1a explored whether values enculturation, as measured by the two subscales (LVS-Cultural Pride and LVS-Familismo), would significantly predict the construct of expertness, even after controlling for the variance contributed by other similar cultural constructs such as behavior acculturation and behavioral enculturation. Results did not support hypothesis 1a, as the addition of the two value measures of enculturation was not statistically significant. Instead, it was observed that significant predictors of expertness, defined as one's belief in the credibility of psychologists and the services they provide, were education and behavioral acculturation. Therefore, individuals with positive attitudes about the expertness of psychologists was associated with higher levels of Anglo orientation (i.e., behavioral acculturation) and higher levels of education (i.e., B.A. degree or higher). In other words, results demonstrated that Latinos with greater behavioral orientation to the mainstream culture,

or among those with higher education levels, were more likely to endorse favorable attitudes about the expertness of psychologists and the services they provide.

This finding is not surprising, as both proficiency in the English language (as measured by the AOS subscale) and higher education are likely to provide an individual with greater access to information about mental health services, treatment, and psychoeducation literature on mental illness. Moreover, individuals with higher education are more likely to be exposed to educational health campaigns, have a better understanding of health care issues and treatment, and have greater health literacy, which could result in greater credibility and knowledge of physicians and specialists such as mental health professionals (Andres-Hyman, Ortiz, Anez, Paris, & Davidson, 2006).

Stigma tolerance. Hypothesis 1b predicted that greater adherence to Latino cultural values (cultural pride and *familismo*) would negatively influence Latinos' attitudes associated with the stigma to receive psychological treatment (stigma tolerance) above and beyond the variability accounted for by behavioral acculturation and enculturation. Interestingly, in this sample, Latino cultural values, behavioral acculturation, and enculturation were not uniquely associated with stigma tolerance. This finding contradicts previously held assumptions as well as previous studies that found that higher level of enculturation were associated with higher level of perceived stigma for receiving psychological treatment among Latinos (Rojas-Vilches et al., 2011). These contradictory findings highlight the possibility that the Latino cultural values chosen in this study to represent enculturation (cultural pride and *familismo*) may not contribute to stigma tolerance. One possible explanation is that the measure of Latino cultural values used in this study tapped into beliefs that Latinos should maintain cultural loyalty and

engage in traditional cultural customs, in addition to beliefs about gender norms. It is possible that these cultural values may not contribute to stigma tolerance, whereas other Latino cultural values related to *verguenza* [shame], respect, and dignity may be more closely related to stigma tolerance.

Instead, the only significant predictor of Latinos' stigma tolerance was education, such that Latinos with a B.A or graduate degree had more tolerance for stigma about psychological treatment than Latinos with less education (some college or less). This finding is consistent with past research that has found that perceived stigma of mental health care was higher among individuals with lower education and income (Golberstein, Eisenberg, & Gollust, 2008). Latinos with lower education attainment may have less accessibility to mental health resources in addition to less exposure to the benefits of psychological services, thereby endorsing less stigma tolerance to psychological treatment.

Stigma toward mental illness. Hypothesis 1c stated that the addition of the Latino cultural values of cultural pride and *familismo* (i.e., value enculturation) would significantly contribute to variability in the prediction of negative BTMI, above and beyond the variability accounted for by behavioral acculturation and enculturation. It was predicted that greater adherence to the Latino cultural values of cultural pride and *familismo* would positively predict stigma toward mental illness. Results found that greater adherence to the Latino cultural value of *familismo* significantly predicted negative BTMI; this finding supports the results of Rojas-Vilches et al. (2011), who found that increases in enculturation were related to higher negative perceptions of those with mental illness.

The finding that stronger adherence to *familismo* predicted greater pejorative beliefs toward psychological disorders may be partially explained by the common stigmatic beliefs about mental illness held by some Latinos, such as mental illness being associated with loss of control, dangerousness, and incurability (Hirai & Clum, 2000; Rojas-Vilches et al., 2011). Latinos who hold strongly to cultural values of family, gender roles, and self-concealment may be more likely to want to protect their family reputation and not bring shame to their family (Cabellero, 2011, Hernandez & Bamaca-Collbert, 2016). Fear of not wanting to bring shame upon an individual's own family for having a mental illness can also keep a person uninformed about the myths of mental illness, thereby keeping pejorative beliefs about mental illness intact (Chang et al., 2013).

In addition, the finding that higher behavioral acculturation predicted less negative BTMI is consistent with the assumptions that greater acculturation to the U.S. culture is associated with more favorable attitudes toward help-seeking, which may also reduce stigma toward about mental illness. The lack of a relationship between behavioral enculturation and BTMI stands in contrast to the significant association between valued enculturation and BTMI. This surprising finding suggests that using a values measure of enculturation maybe better than using a behavior measure of enculturation in relation to assessing mental health beliefs and attitudes.

Intentions to seek help. With regards to the prediction that greater enculturation would predict weaker intentions to seek psychological services, above and beyond the variability contributed by behavioral acculturation and enculturation, hypothesis 1d was also not supported. Neither the value of cultural pride nor *familismo* contributed significant variance to help-seeking intentions among Latinos. Moreover, neither of these

variables were associated with help-seeking intentions, suggesting that either Latino cultural values were neutral or may not be directly associated with one's intentions to seek help. The lack of an association between Latino cultural values and intentions to seek psychological help extends previous findings by Ramos-Sanchez and Atkinson (2009), who also found no significant relationship between traditional cultural values and help-seeking intentions.

While enculturation did not significantly contribute to help-seeking intentions, results did reveal that age and behavioral acculturation were important individual predictors of help-seeking intentions. These findings are consistent with previous research regarding the impact of acculturation on intentions to use mental health services among Latinos. For example, Miville and Constantine (2006) found that among Mexican college students, those with greater acculturation to the United States positively predicted help-seeking behaviors; similarly, Kuo et al. (2015) found that among Canadian Latinos, endorsement of Anglo-orientation was positively associated with help-seeking intentions. While the acculturation/enculturation literature has been mixed in regard to its relationship with intentions to seek mental help among Latinos. The current research supports the assumption that increased adaptation to the U.S. culture, as measured by behavioral acculturation, may result in greater willingness to engage in help-seeking behavior. One possible explanation is that immersion in the dominant culture may increase their knowledge of mental illness and appropriate treatment, which in turn, may increase a person's willingness to seek mental health treatment.

The finding that foreign-born nativity status was a significant predictor of intentions to seek treatment was unexpected. It has been well documented that foreign-

born Latinos in the United States are less likely to pursue traditional mental health care than their U.S.-born counterparts (Keyes, Martins, Hatzenbuehler, Blanco, Bates, & Hasin, 2010; Vega et al., 2001). Instead, foreign-born Latinos are more likely to utilize general health care when dealing with a mental health problem (Lee, Laiewski, & Choi, 2014).

Among participants born outside the United States, a higher percentage had migrated to the country around the age of 18 years and reported living in the United States an average of 23 years or longer. Past studies have found that Latino/as with increased lengths of residence in the United States are more likely to begin adapting to the traditions and customs of the mainstream culture and may have weaker identification with Latino/a cultural values (Cook, Alegria, Lin, & Guo, 2009; Finch and Vega, 2003). Alegria et al. (2007) also found that longer length of residency in the United States and greater English proficiency increased the likelihood of mental health service use among Latinos with no history of psychiatric disorder in the past year. Therefore, it is likely that among foreign-born Latinos in the current sample, greater years of residency in the United States may lead to greater cultural adaptation of the mainstream culture, such as greater English language proficiency and other acculturation behaviors, which in turn, may result in greater service utilization of mental health services (Bauer, Chen, & Alegria, 2010).

Depression. Finally, hypothesis 1e, which stated that the addition of the Latino cultural values would contribute a significant amount of variance in depression scores, even after controlling for the variability accounted for by behavioral acculturation and enculturation, was supported. A recent systemic review of the relationship between

familismo and mental health outcomes among Latinos demonstrated the inconsistencies throughout the literature concerning the relationship between *familismo* and depression (Valdivieso-Mora et al., 2016). The findings from this study that greater adherence to the Latino cultural value of *familismo* was a significant predictor of lower depression symptoms, suggests that the Latino value of *familismo* operates to protect Latino adults against depression symptoms. Research investigating the inverse relationship between *familismo* and depression has suggested that strong bonds with the family unit, combined with a sense of protection of familial honor and respect, may promote responsible behavior and discourage any behavior that would disgrace or bring same to the family (Ayon, Marsigia, & Bermudez-Parsai, 2010; Valdivieso-Mora et al., 2016). It is unknown whether greater adherence to *familismo* protects against depression as a result of the positive family support or due to *referent familismo*, which refers to the beliefs that one's behavior should be in line with family expectations (Sabogal et al., 1987).

Education was also a significant predictor, with depression symptoms increasing among Latinos with lower education (H.S. or less). A great deal of empirical evidence has indicated that lower education attainment is related to elevated depression symptoms and increases the odds of developing depression (Akhtar-Danesh & Lenseen, 2007; Kaplan, Roberts, Camacho, & Coyne, 1987). Education is a unique source of human capital that influences occupation, social mobility, income, and status, and may improve emotional well-being and self-efficacy (Bauldry, 2015; Bjelland et al., 2008; ten Kate, de Koster, & van der Waal, 2017). Therefore, is it likely that depressive symptoms are associated with the less educated because individuals with lower education may have lower income and greater socio-economic stressors. Taken together, these findings

confirm previous findings that suggest that Latinos who maintain adherence to the cultural value of *familismo* and who have a higher education may be better protected from the risk of depression symptoms (Ayon et al., 2010).

Multiple Mediation and Moderation Analyses

The second hypothesis examined the relationship between values enculturation and intent, while exploring the mediating effects of attitudes about psychological treatment (stigma tolerance and expertness) and stigma toward mental illness. It was hypothesized that stigma tolerance, beliefs about the expertness of psychotherapist, and stigma toward mental illness are all different mechanisms through which values enculturation influences Latino adults' intentions to seek psychological services. Although bivariate analyses demonstrated no association between values enculturation and intent, the current study examined the hypothesized multiple mediation model by examining the indirect effects of the relationship between values enculturation and intent. This examination was conducted based on recommendations of Agler and Paul De Boeck (2017) and Hayes (2018), who stated that a direct effect between the predictor variable and outcome variable is not required before conducting mediation analysis.

The first parallel mediation analysis examined whether attitudes about psychological treatment (stigma tolerance and expertness) and stigma toward mental illness may play different roles in the relationship between Latinos' cultural pride and help-seeking intentions. Using parallel mediation, it was revealed that the psychological attitude of expertness was the only significant mediator of the relationship between the Latino value of cultural pride and help-seeking intentions. As such, Latinos with greater retention of the Latino value of cultural pride reported stronger beliefs of psychologists'

expertise, which in turn led to greater help-seeking intentions. Considering the three proposed mediators (expertness, stigma tolerance, and stigma toward mental illness), it was surprising that only expertness explained the relationship between adherence to Latino cultural pride and help-seeking intentions. However, it makes sense that stronger beliefs in the merits of psychologists' expertise would likely influence one's willingness to seek a mental health professional if they were experiencing a problem.

In the second parallel mediation analysis, the researcher examined whether any of the attitudes about psychological treatment (stigma tolerance and expertness) and stigma toward mental illness would explain the relationship between the Latino value of *familismo* and help-seeking intentions. The results indicated that *familismo* had no direct effect on help-seeking intentions. More importantly, beliefs about psychologists' expertise (expertness), stigma tolerance, and stigma toward mental illness did not affect help-seeking intentions. The findings from both of these parallel mediations suggests that values enculturation measured by one's adherence to cultural values influences help-seeking intentions through its effect on the attitude of expertness. More specifically, the Latino enculturation value of cultural pride influences help-seeking intentions through its effect on the belief of psychologists' expertise.

It is interesting that the Latino value of cultural pride and not *familismo* predicted one's belief about psychologists' expertise. This is in contrast to findings by Kuo et al. (2015) who demonstrated that *familismo* had an indirect effect on help-seeking intentions via attitudes. To the researcher's knowledge, the current study is the first to examine the attitude of expertness as a potential mediator on the relationship between cultural values and help-seeking intentions. The results from the present study may indicate that for

some Latinos, *familismo* may not play a role in help-seeking attitudes or behaviors. Alternatively, for Latinos in the current sample, ethnic loyalty (i.e., cultural pride) had a positive influence on help-seeking attitudes and behaviors. These findings also underscore the importance of not generalizing that all traditional Latino values are associated with help-seeking attitudes or behaviors. Finally, it is possible that another variable may explain the relationship between Latino cultural pride and expertness or moderate the indirect effect of expertness on Latino cultural pride and help-seeking intentions. Additional explorations of this complex relationship are warranted.

In the final two hypotheses, it was predicted that the relationship between Latino cultural values (cultural pride and *familismo*; hypotheses 4 and 5, respectively) and help-seeking intent would be mediated by Latino help-seeking attitudes and stigma toward mental illness. Furthermore, this indirect effect would also be moderated by levels of depression symptoms. Hypotheses 4 and 5 were not supported because there was no evidence of a moderated mediation effect. In other words, the magnitude of attitudes of psychological treatment (stigma tolerance and expertness) and stigma toward mental illness connecting cultural values to help-seeking intent was not dependent on depression.

The lack of significant results was not surprising, given the weak association between the predictor variables and both the mediating and outcome variables. However, taken together, findings from hypotheses 2-5 suggested that the predicted models of help-seeking, based on models adapted from the theory of reasoned action, were not supported in this study. First, using values enculturation as a predictor of intentions to seek help may not have been the most appropriate predictor variable for this sample, given that it assumed that Latino participants would endorse stronger maintenance of traditional

cultural values (e.g., valued enculturation). Second, exploring factors associated with intentions to seek psychological services among Latino is complex, given the variability in different ethnic groups and factors that may be more relevant to one group versus another. Future studies should consider examining more cognitive factors of help-seeking (e.g., stigma, mental health literacy) in addition to assessing past mental health experiences.

Limitations

There are several limitations of the current study that should be noted. The cross-sectional design of the study does not allow for causal inferences to be made. As such, the use of longitudinal methodologies should be conducted in the future. Moreover, the present study included a relatively large sample of Mexican Americans, which limits the generalizability of the findings to other Latino populations. Given the heterogeneity of Latino populations, future studies should consider how certain Latino values and stigma toward mental illness may differ across Latino subgroups.

It is also important to consider that the recruitment of participants from various sources (e.g., a community event, university groups, and social media interest groups for Latinos) may have introduced sample bias in the current study. In particular, unique characteristics among participants recruited online may impact the generalizability of the findings. For example, Latino participants who completed the study online, on average, were younger in age, reported having spent more time in education, and indicated having a stronger Anglo orientation. Therefore, future studies should aim to include a diverse range of participants from different education levels conduct separate analyses based on level of education.

Moreover, the use of a single-item to measure help-seeking intention may not have been sensitive enough to assess additional information relevant to this construct. Future studies should carefully consider the pros and cons of the available measures of behavioral help-seeking. Finally, as the current study explored various constructs and models of help-seeking with a wide range of cognitive and culture variables, utilizing a more advance modeling program such as structural equation modeling might have allowed for a better exploration of how the variables of interest related. A path analysis or structural equation modeling would allow for greater flexibility in testing different models of interest. While the procedures outlined in the current study using complex mediation and conditional indirect effects of moderation were helpful, they are still limited compared to structural equation modeling.

Implications for Future Directions

Despite the limitations and nonsignificant findings of the proposed models of help-seeking among Latinos, the current study is one of few studies that have examined the multidimensional aspects of acculturation and enculturation by using measures that not only capture their behavioral adaption, but also explore their maintenance of cultural values. While the Latino values of cultural pride and *familismo* were demonstrated to be weak predictors of help-seeking attitudes and intentions, other Latino cultural values such as respect, *marianismo*, *machismo*, or fatalism might be more salient to the psychological outcomes that were examined. Moreover, other cultural variables such as biculturalism or bicultural stress might offer a more comprehensive understanding of how navigating two cultures impacts the mental health and service use of Latinos. Furthermore, this study is the first to use the BAPS scale exclusively with a Latino population. As such, examining

the reliability and validity of this measure with a Latino sample would be useful. The lack of help-seeking and psychology related instruments that have been normed with a Latino population continues to be problem when designing a study. Finally, the significant finding that expertness mediated the relationship between Latino cultural pride and intention highlights the importance of one's perceptions of the merits, expertise, and training of mental health providers in predicting help-seeking behaviors. This construct would benefit from further exploration utilizing qualitative or mixed method approaches. Additionally, replication of these findings is needed with a Latino sample, where selection bias and sample bias are carefully avoided in the study design.

Conclusions

In summary, examining the value dimension of enculturation in favor of the traditional behavioral measure allowed for a richer understanding of how Latino cultural values may influence ones' beliefs and future behaviors. For example, the findings that the cultural value of *familismo* was a greater predictor of stigma toward mental illness, or that Latino cultural pride positively impacted the attitude of expertness, offer rich information on how specific cultural values affect psychological outcomes. In contrast, measures that assess the retention of culture based on language use are limiting and often yield insignificant findings, as demonstrated in the current study. However, using cultural values as a measure of enculturation is likely to offer a better measure of Latinos' retention of their culture of origin.

Findings from the study also indicated that the behavioral measure of acculturation was a good predictor of help-seeking attitudes and intentions to seek treatment. However, the construct and process of acculturation is complex, and

significant findings of association can sometimes lead to further confusion and questions. For example, are substantial differences in acculturation attributed to adaption to the mainstream culture, language use, values, or something entirely different? Given that there is value in using both behavioral measures and values measures of enculturation and acculturation, future studies might benefit from using them together to explore different variation of cultural identity and orientation (for example, behavioral acculturation with Latino cultural values—AOS and LVS).

Another important finding that emerged from the current study was that the perception of expertness, defined as one's positive belief in the merits of psychologists based on their training and services, was a significant mediator between enculturation and intention to seek help. This finding provides evidence that the attitude or perception of being an expert in one's field is valued among Latinos and is positively related to one's help-seeking intentions. This is important, as it suggests that contrary to mainstream beliefs about Latinos, Latinos in the current study generally demonstrated a favorable understanding of the merits and value of mental health specialists, such as psychologists. Furthermore, this positive attitude about psychologists may not just increase the likelihood of seeking mental health services but may also be related to one's retention of services. This is still yet to be explored, as there is a scarcity of research examining the counseling process and beliefs about mental health providers within a nonclinical Latino adult population.

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