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Abstract

The purpose of the study was to investigate the relationship between cultural factors, psychological distress, barriers, and attitudes toward seeking psychological help among Diné tribal members. This study is in response to calls to consider psychological and cultural factors in the underutilization of mental health services by ethnic minorities. The present study examines psychological and cultural antecedents to seeking professional psychological help among Diné tribal members ($N=119$). It examined the mediating role of attitudes toward help seeking in the relationship between psychological distress, barriers to care, three acculturation variables, and intentions to seek counseling. Mediation was assessed with Hayes' PROCESS macro in SPSS. Culture-specific variables (residence location, acculturation) were used to expand Cramer's original model. The cultural pathways demonstrated significant impacts on the help-seeking process of Diné tribal members. Implications of these findings are discussed and inform recommendations for the delivery of culturally competent mental health services for Diné clients and suggestions for supporting Diné utilization of psychological services. Recommendations are made for future areas of research.

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Chesleigh N. Keene

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ABSTRACT

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CHAPTER 1:

INTRODUCTION

Cultural differences in psychological help-seeking behavior have been identified as an important component of counseling services utilization. The roles of culture, ethnicity, and race in counseling for minority populations need to be understood in order to provide culturally sensitive services (Nouroozifar & Zangeneh, 2006). Underserved racial ethnic minority groups face barriers to services that are unique and counseling services for these groups may be improved if based in these clients' personal beliefs and norms (Carten, 2006).

Native Americans have historically underutilized counseling services, even when available (McCormick, 1996) and past research found this particular group experienced higher dropout rates than those from other ethnic minority groups (Sue, Allen, & Conaway, 1978). Native Americans have also been found to use a combination of traditional healing practices with Western services and Herman-Stahl, Spencer, and Duncan (2003) found Native American engagement in therapy to be predicted by gender, age, and insurance. More recent research has found that the lifetime prevalence of psychological service utilization among Native Americans with depression is 65% and for those with a bipolar disorder diagnosis it is 67.2%, which indicated higher service utilization than Asian Americans and Black Americans (Lee, Martins, Keyes, & Lee, 2011), but the findings also showed that Native Americans consistently underutilized

services when compared to White or Hispanic participants (Lee et al., 2011). Efforts to increase counseling use and improve accessibility to services among Native Americans have been relatively unsuccessful, with reports of staffing issues and shortages at sites that provide the majority of mental health services to Native populations (Indian Health Services; IHS, and tribal facilities). This demonstrates considerable limitations in the services that can be offered to Native Americans (Levinson, 2011). Research has also shown that physical, personal, social, and economic challenges affect Native Americans' access to counseling services at IHS and tribal facilities (Levinson, 2011). This information highlights potential external access barriers, but it also offers a focal point of exploration into the potential roles of internal psychological factors. Such psychological factors "may act as important intervening variables between the recognition of distressing psychological problems and one's actual decision to seek help," (Kushner & Sher, 1991, p. 196). There is little research that explores or explains the help-seeking attitudes and behaviors of Native Americans and their willingness to seek counseling services. Existing research and theoretical work regarding the psychological development of Native Americans does discuss what psychological interventions may work (Gone & Alcantara, 2007), how to work with this unique population (Beitel et al., 2013), and considerations for the unique stressors they experience (American Psychological Association, APA, 2010). However, only three studies have examined help-seeking behavior in Native Americans (Freitas-Murrell & Swift, 2015; Beals et al., 2006; Bee-Gates, Howard-Pitney, LaFromboise, & Rowe, 1996). The present study seeks to extend the literature on help-seeking in Native Americans by examining both internal and external factors in one of the nations largest federally recognized tribes: the Navajo or

Diné. The term “Diné” means “the people” and is a preferred descriptor for the tribe. The name “Navajo” is not a name the Diné took on for themselves and does not capture the worldview of the tribe that they are but one of the figures that make up the world. Culturally relevant variables were added to this study in order to capture cultural information for the Diné tribe.

Psychological Antecedents of Help-Seeking Behavior

Previous research has identified constructs that are important to an individual’s decision to seek counseling. Specifically, the psychological help-seeking literature has identified negative attitudes toward counseling as significantly associated with avoidance of professional psychological services and decreased willingness to seek counseling (Cepeda-Benito & Short, 1998; Cramer, 1999; Deane & Todd, 1996; Leaf & Bruce, 1987). This body of literature has indicated that an individual’s perceived lack of social support (Cramer, 1999) as well as their psychological distress influences motivation to seek counseling, particularly when their distress exceeds their personal coping abilities (Cepeda-Benito & Short, 1998; Cramer, 1999; Kelly & Achter, 1995).

The empirical support for one’s willingness to seek counseling and an individual’s attitudes toward counseling (Cramer, 1999; Leech, 2007; Vogel, Wade, & Hackler, 2007), psychological distress (Vogel & Wei, 2005), social support (Constantine, Wilton, & Caldwell, 2003; Leech, 2007), acculturation (Obasi & Leong, 2009), barriers to help seeking (Komiya, Good & Sherrod, 2000; McCarthy, Pfohl, & Bruno, 2010; Vogel, Wade, & Haake, 2006), and socioeconomic status have been well-documented. Cramer (1999) proposed a conceptual model of psychological help-seeking and it represents the incorporation of four key constructs, three of which are relevant to the

present study: psychological distress, attitudes toward seeking professional help, and social support.

Theoretical Framework

Cramer's (1999) model is a path model in which social support, self-concealment, psychological distress, and attitudes toward counseling were found to predict an individual's willingness to seek psychological help. The studies Cramer used to design his model found higher levels of psychological distress, lower levels of social support, and positive attitudes toward counseling significantly predicted one's intention to seek counseling (Kelly & Achter, 1995; Cepeda-Benito, & Short, 1998). Cramer conducted his study with undergraduate psychology students, but Leech (2007) found that the help-seeking intentions of graduate counseling students paralleled Cramer's original results. In these two studies (Cramer, 1999; Leech, 2007) attitudes toward counseling were found to account for most of the variance in the prediction of intentions to seek help. Cramer's findings suggest that social support influences psychological distress and psychological distress predicts help seeking. The main goal of the present study is to extend Cramer's model to Diné tribal members and incorporate the culturally relevant constructs of acculturation, barriers to care, and location of residence (urban versus reservation).

Studying the help-seeking behaviors, attitudes, and willingness of Diné tribal members is important for a number of reasons. Such research will offer insight into how Diné tribal members conceptualize mental health and well-being. It will help to understand how tribal members understand the mental health resources available to them and will clarify whether such resources actually exist in their communities. The results of this study will provide an understanding of the unique needs for behavioral, cognitive,

and emotional counseling and in this understanding can inform future provision of counseling services to Native Americans.

Predictors of Help Seeking Behaviors

Chen and Mak (2008) found a difference in help seeking behaviors in more Westernized Chinese groups (European Americans and Chinese Americans) when compared to a Hong Kong Chinese sample, suggesting that for this particular collectivist culture, help-seeking was associated with Western influences. Participants with more Western influence reported more positive attitudes toward seeking professional help and reported more actual use of mental health services. This is important in considering the hypotheses of this present study.

Gender has been shown to be a significant construct, particularly in that women hold more favorable attitudes toward counseling than men (Wallace & Constantine, 2005; Leong & Zachar, 1999). Additional work has shown that women are more likely to report higher levels of social support and distress levels (Rosenfield, 1999; Wiseman, Guttfreund, & Lurie, 1995) and are more likely to use counseling services than men (Deane & Todd, 1996).

Studies have found help-seeking to be significantly and positively related to psychological distress and willingness to seek counseling (Cepeda-Benito & Short, 1998; Cramer, 1999). In contrast, people with less social support are more likely to seek counseling (Birkel & Reppucci, 1983; Goodman et al., 1984). Cramer (1999) suggested that this might be because those with less social support have more psychological distress. Socioeconomic status has been found to impact help-seeking behaviors (Smith,

2005) as well as educational level (Fischer & Cohen, 1972) with higher educational level being correlated with more positive attitudes toward seeking counseling.

Limitations in the Literature

At present, there is a notable gap in the literature regarding Native Americans' willingness to seek counseling and this subsequently results in very few studies examining factors at the tribal level. There are published studies on adolescent attitudes and behaviors regarding seeking counseling (Bee-Gates, Howard-Pitney, LaFromboise, & Rowe, 1996), and older, rural Native Americans' willingness to seek counseling (Roh et al., 2015). Some studies have examined Native American help-seeking in general (Beals et al., 2006; Freitas-Murrell & Swift, 2015). Others have considered groups that endorsed suicide (Scheel, Prieto, & Biermann, 2011; Wexler et al., 2015), and Native Americans struggling with substance abuse (Venner et al., 2012). The lack of research in this area raises questions about whether or not Native Americans are engaging in beneficial treatment and if practitioners are providing informed services to their clients. Due to the known benefits of counseling and the known exacerbation of symptoms if personal problems are untreated, it is important to learn about the attitudes and behaviors of Native Americans regarding willingness to seek counseling and the perceived barriers to seeking help.

There is a foundation of applicable research for the current study, particularly around the unique counseling needs of Native Americans. Sue and Sue (2001) noted that mental health professionals should consider tribal affiliation, languages spoken, self-identity, and place of origin and current relationship with one's culture in their clinical treatment of Native Americans. In terms of treatment engagement, Sue (1977) found that

half of Native American clients at a community mental health center ended treatment after their first visit. Since Sue's 1977 study, researchers have contributed to the importance of understanding the unique backgrounds of America's indigenous tribes (Thomason, 1991; Thomason, 2012; Manson & Trimble 1982). Presently, the major gap in the literature is information on attitudes toward counseling and willingness to seek counseling. The present study will examine these considerations and will additionally explore cultural factors that may influence willingness to seek counseling and potential barriers to help seeking that Native Americans encounter.

Current Study

Native Americans are a historically underrepresented population in counseling research. This underrepresentation is of great concern due to the unique mental health needs of Native Americans. Especially troubling is that the field of counseling psychology has failed to keep pace with the unique needs of Native American clientele, but also in conducting research to provide understanding about their needs (Thomason, 2012; Gray & Rose, 2011).

Thus, within the present study I investigate the relationships between psychological and cultural variables, help-seeking attitudes, and behaviors. Specific help-seeking constructs that were investigated in this study were willingness, attitudes, social support, and barriers.

Additional factors to be explored were: culture, residence, gender, socioeconomic status, psychological distress, and acculturation. Each factor was analyzed as a predictor of Diné attitudes toward, and willingness to seek counseling.

Research Questions

1. Do psychological and cultural variables salient to Native Americans predict help-seeking attitudes?
 - a. *Hypothesis 1:* Acculturation, psychological distress, barriers to access to care, and location of residence (urban versus reservation) significantly predict attitudes toward counseling. Urban residence, higher levels of acculturation, and greater psychological distress are positively related to attitudes toward counseling. Greater barriers are negatively related to attitudes toward counseling.
2. Do attitudes predict willingness to seek counseling?
 - a. *Hypothesis 2:* Attitudes toward counseling are significant, positive predictors of willingness to seek counseling.
3. Do attitudes explain the relationship between psychological and cultural variables and willingness to seek counseling?
 - a. *Hypothesis 3:* The relationship between psychological and cultural variables and willingness to seek counseling is explained by attitudes.

Definition of Terms

For the purpose of clarification, important terms are defined as follows:

Native American - An indigenous person of the United States of America.

Tribal affiliation - Membership in one the 562 federally recognized indigenous tribes of the United States of America.

Counseling - The provision of assistance and guidance in resolving personal, social, or psychological problems and difficulties (synonymous with “psychotherapy,” “therapy,” “mental health services,” and “mental health treatment”).

Socioeconomic Status (SES) - An economic and sociological measure of a person’s work experience and historical economic and social position in relation to others, based on income, education, and occupation.

Acculturation - Cultural modification of an individual, group, or people by adapting to or borrowing traits from another culture (typically the dominant culture).

Psychological Distress - A general term that is used to explain unpleasant, undesirable feelings or emotions that impact a person’s functioning.

Urban Dwelling - Living in a city or town.

Reservation dwelling - Living on a Native American reservation, which is an area of land managed by a recognized Native American tribe. There are approximately 310 Native American reservations in the United States. Reservations are a result of the 1851 Indian Appropriations Act, which authorized the reduction of traditional lands and in some cases, relocation of tribes to federally-identified lands.

CHAPTER TWO:

REVIEW OF THE LITERATURE

This chapter reviews the literature on the constructs investigated in the present study with consideration for the cultural factors that affect these relationships for Native Americans. This chapter focuses on the empirical research on attitudes toward the nature/origination of psychological issues, psychological distress, seeking professional psychological help, the social support constructs outlined in Cramer's (1999) model of professional help-seeking for psychological distress, and identified cultural factors of interest. This chapter seeks to provide a thorough exploration of these constructs as they specifically relate to the help-seeking experiences of Native Americans. In sum, a case is made for the consideration of Native American culture and Native American coping behaviors in formulating a model of help-seeking behavior among Native Americans.

Help-seeking

Previous research on help-seeking among Native Americans has been exploratory in nature, largely focusing on the inconsistent use of professional psychological services (Sue & Sue, 2002). Researchers have yet to use explicit models to evaluate the direct and indirect effects of counseling. It has been proposed that more than half of people struggling with mental illness do not seek professional help (Komiya, Good, & Sherrod, 2000), and that the majority of those who may benefit from psychological services do not

seek them (Corrigan, 2004; Komiya, Good, & Sherrod, 2000; Snowden, 1999). For example, only 12.6 percent of Native American adults in need of substance abuse treatment in the past year received the treatment they needed (SAMHSA, 2015). In a study with African Americans, Corrigan (2004) found that as few as 20% of participants actually sought out mental health services and that between 40 and 90% with serious mental illness are not receiving adequate treatment. In their metaanalysis, Vogel, Wester, and Larson (2007) reported that less than 40% of people sought professional services within a year of the onset of a psychological disorder. The authors of these papers have highlighted the lack of attention to important demographic variables. Many of the studies cited by Vogel, Wester, and Larson (2007) were conducted with White participants.

Culturally Based Help Seeking Model

Cramer (1999) investigated the relationships among social support, self-concealment, level of distress, and attitudes toward counseling with help-seeking behavior through path analysis. The path modeling allowed for a unique understanding of the effect of each variable on help-seeking attitudes and intentions. These results indicated that the likelihood of seeking counseling increased when participants had positive attitudes toward counseling and attitudes were a better predictor of intentions than a participant's experience of psychological distress, which is interesting considering that psychological distress has been found to be a motivating factor for help-seeking (Constantine, Chen, & Ceesay, 1997).

Liao, Rounds, and Klein (2005) hypothesized that there were other variables in Cramer's (1999) model that were relevant to minority populations and they explored the acculturation effects on help seeking in an Asian and Asian American undergraduate

population. Liao et al. (2005) found that the variables of interest (behavioral acculturation and adherence to group cultural values) significantly added to the prediction of attitudes to counseling which also predicted willingness to seek counseling. While this research was conducted with Asian Americans, it provides information about help-seeking and the variables that influence help-seeking for a minority population. The results of this study indicate that Cramer's model was improved when culture-based variables were added to the model. Further, Liao et al.'s model demonstrated that acculturation influenced one's attitudes toward counseling, which is an important consideration when modeling with diverse groups.

Due to these findings, the model developed by Cramer (1999) will serve as a model of help-seeking attitudes and behaviors for Native Americans in the present study. Modeling help-seeking on Cramer's foundational model will establish a basis for understanding important variables in predicting the help-seeking intentions for Native Americans. With reference to Liao et al.'s (2007) findings, the consideration of cultural factors is important because they may influence the help-seeking behavior of Native Americans. While it is unlikely the results will mirror Liao et al.'s, as their study was conducted with Asian and Asian American participants, the consideration of culture-based values and their relation to Native American help-seeking behaviors would be a contribution to the literature.

Demographics and Help-seeking

The help-seeking attitudes and behaviors of minority groups have been examined (Deane & Todd, 1996; Fischer & Cohen, 1972; Milville & Constantine, 2006; Price & MacNeill, 1992; and Vogel & Wester, 2003; Smith, 2005). These studies have

highlighted that help-seeking behaviors can differ depending on gender, race, age, and sexual orientation.

Ethnicity/Race and Help-seeking

One important consideration of Native American people is that they do not hold only one ethnic identity. For simplicity, ethnicity is addressed in this context as social groups with shared beliefs in member origin (Chandra, 2006; Fearon, 2003).

Additionally, due to damaging origin studies (e.g. research with the Havasupai tribe of the Grand Canyon, in which researchers revealed evidence that challenged the tribe's origin stories), it is inappropriate to question whether or not members of a given group actually share common ancestors and it is more useful to focus on the shared belief that a community shares a common origin (Green, 2014). While many are accepting and understanding of cultural identity as a belief in common origin and thus grounds for an ethnic identity, it is often overlooked that Native Americans can have complicated memberships with their communities. To illustrate this point, Hanson (1997) explains that a Native American can be a member of the Upper Brulé *thiyóšpaye* band, Brulé clan, Lakota tribe, Sioux nation and the Native American race (p. 203). Chandra & Wilkinson (2008) highlight other examples of ethnic identities that are similarly nested. Native Americans have multiple ethnic identities to choose from but in recent years, it has been observed that when Native Americans move to a city, they declare a stronger ethnic identity (Green, 2014). With these considerations in mind, participants in the present study will need to have a primary identification as Diné. It is beyond the scope of this study to explore beyond this identity, but this could be an interesting consideration for future research within tribal groups.

Gender and Help-seeking

Women tend to have more positive attitudes toward professional psychological services while demonstrating more willingness to seek help than men do (Fischer & Turner 1970; Price & MacNeill, 1992; Leong & Zachar, 1999; Milville & Constantine, 2003). Unless men have experienced personal counseling themselves, in which case, they may demonstrate more positive judgments of counseling, as in a study conducted by Blazina and Marks (2001). A proposed reason that men may underutilize counseling services is that they have less favorable, stigmatized attitudes toward services (Gonzalez, Alegria, & Prihoda, 2005). What is considered “masculine” differs across social and cultural contexts (Liu, 2005). Help-seeking may be viewed negatively and as a weakness (Pederson & Vogel, 2007). White American representations of Native American men have embodied images of barbarism, stoicism, spirituality, the wise elder, and that of the “noble Indian,” (Rogers, 2007). Gender roles for Native American men have changed due to the shift away from their traditional roles as hunters and warriors. Williams (2004) makes an argument that the modern generation of Native men is working to use education and economic skills to support their tribes and often find this as fulfilling as a traditional masculine role.

Prior to colonization, Native Americans had clearly defined gender roles. Many tribes were matrilineal and clan membership and material items descended through the women. It is very difficult to generalize indigenous societies, though, because the diversity of Native Americans spans hundreds of different belief systems and social organizations.

Further gender research suggests that self stigma is a mediating factor for men in seeking psychological help (Vogel, Heimerdinger-Edwards, Hammer, & Hubbard, 2011), but due to less than 1% of the sample being Native American, no specific information was provided for Native men's responses in the study. The present study will consider gender differences in a Diné sample.

Attitudes Toward Seeking Professional Psychological Services

A contemporary perspective of psychological help-seeking is that it is related to social class (Morris, 2010; Smith, 2005) and cultural factors (Liao et al., 2007). Research has demonstrated underutilization of mental health services by ethnic minorities and that minority attitudes toward help-seeking for psychological issues are different than those of the majority group (Leong et al., 1995). The earliest research into this understanding centered on the experiences of African Americans. Research demonstrated that African Americans demonstrated inconsistent utilization of psychological services (Snowden, 1999), and were less likely than White participants to utilize mental health services (U.S. Department of Health and Human Services, et al., 1999). There are hypotheses about underutilization including that those from minority groups have less access to services (Alegria, et al., 2002), are unable to afford services, and have negative perceptions of psychological disorders and services available (Wallace & Constantine, 2005). Other factors that may contribute to differences in help-seeking relate to cultural mistrust of institutions, different cultures, and white establishments (Milville & Constantine, 2006; Price & MacNeill, 1992; Wallace & Constantine, 2005). Little is known about the help-seeking attitudes and behaviors of Native Americans but they have also been identified as a minority group that underutilizes psychological services, even when the services are

available (Dickerson, 2006; Shore & Manson, 2010; Duran et al., 2005). Native Americans have been found to use available mental health services at less consistent rates than other populations (Snowden & Cheung, 1990) and little information is available regarding how these constructs differ when comparing urban and reservation-dwelling Native Americans.

Government reports have revealed considerable systemic barriers to help-seeking for Native Americans. These barriers include understaffed behavioral health centers, inability to provide services due to lack of licensed staff, difficulty obtaining reliable transportation to services, and frequent referrals to outside organizations (Levinson, 2011).

How Attitudes Relate to Psychological Help-seeking

Fischer and Fischer (1992) propose that willingness to engage in a specific behavior should accurately predict the execution of the actual behavior. A number of studies have indicated that behavioral intention accounts for a significant amount of variance in behaviors observed, which supports the notion that intentions predict behavior (Armitage & Conner, 2001; Notani, 1998; Randall & Wolff, 1994).

Such studies examined willingness to seek counseling as a hypothetical precursor to help-seeking behavior.

Willingness to perform a behavior has been linked to attitudes, subjective norms, and self-efficacy, (Sheeran, Norman, & Orbell, 1999). Across minority groups, the research has indicated that attitudes toward psychological treatment are one of the best predictors of actual treatment engagement (Jimenez, Bartels, Cardenas, & Alegria, 2013; Nam et al., 2013; Vogel, Wade, & Hackler, 2007; Zhange & Dixon, 2003). Attitudes

may differ by cultural background. For example, collectivist groups possess cultural value orientations that may lead to valuing the needs of one's group above the needs of the individual (Markus & Kitayama, 1991). Markus and Kitayama (1991) also note that people from collectivist groups place more importance on relationships and the expectations of others rather than on their personal desires. Native Americans are a group with a collectivist orientation (Heine, 2008; Hossain, Skurky, Joe, & Hunt, 2011). Help-seeking attitudes may be strongly shaped by Native American cultural norms and this is an important consideration in the exploration of psychological help-seeking for psychological issues among Native Americans (Johnson & Tomren, 1999). Attitudes toward psychological services could help to identify ways to increase actual utilization of psychological services.

Native American Attitudes Toward Seeking Psychological Help

Attitudes toward psychological services among Native Americans are helpful in understanding help-seeking behavior. Yet, there is very little research on this topic. It has been hypothesized that attitudes toward psychological services play a role in the underutilization of psychological services by Native Americans (Wolsko, Lardon, Mohatt, & Orr, 2007). A 2005 study found that a majority of Native American participants with lifetime psychological disorders had sought mental health help or spiritually traditional sources (Native American church and culture-specific beliefs) of help at least once in their lifetime (Beals, et al., 2006). Help-seeking attitudes have also been assessed in Native American college students (Price & McNeill, 1992). Participants who had strong tribal cultural attribution displayed more negative attitudes toward

counseling help-seeking, confidence in mental health professionals, and openness to therapy.

In general, people from racial minority backgrounds seek help less frequently than Whites/European Americans due to negative attitudes toward services (Constantine, Wilton, & Caldwell, 2003; Snowden, 1999). Stigma about help-seeking has also been found to predict attitudes toward psychotherapy (Vogel, Wade, & Hackler, 2007). Stigma is defined as the negative experience or perception that results from seeking psychological help and encompasses both the social and private self (Corrigan, 2004). Social and self-stigma have been negatively correlated with help-seeking attitudes (Vogel et al., 2007; Owen, Thomas, & Rodolfa, 2013). Vogel et al. conducted their study with 680 undergraduates and follow up studies have consistently found that stigma significantly predicts help-seeking attitudes (Nam et al., 2013). Vogel, Heimerdinger-Edwards, Hammer, and Hubbard (2011) found that self-stigma explained 59% of the variance in attitudes toward seeking psychological help with a significant difference for men of ethnic minority groups. People who believe mental illness and psychological issues are stigmatizing are less likely to seek professional help (Vogel, Heimerdinger-Edwards, Hammer, and Hubbard, 2011). There have been reports that psychiatric disorders have greater stigma attributions in ethnic minority populations (Alvidrez, 1999). Selva de Crane and Spielberger (1981) found that African American college students reported more negative views about mental illness than their White peers. One study of Alaskan Natives (Freitas-Murrell & Swift, 2015) found that cultural identification was a stronger predictor of help-seeking attitudes than the perceived public stigma of seeking psychotherapy. Alaskan Natives who identified more with majority

culture were more likely to endorse positive attitudes toward psychotherapy (Freitas-Murrell & Swift, 2015). Beyond this, there does not seem to be research examining the attitudes of Native Americans toward psychological services. However, examining the attitudes other minority groups have about psychological services can provide some insight into what Native Americans may experience.

Social class also plays a role in help seeking, with some understanding that people from low-income households reported more concern about stigma toward psychological help than middle class or more educated people (Thompson & Dvorscek, 2013). Additionally, Smith (2005) highlighted the barriers to access to psychotherapy for poor, low SES individuals. Native Americans are more likely to live in poverty than the total U.S. population: 28% of Native Americans on reservations and 22% of all Native Americans (on and off reservations) live in poverty compared to 12% of the general U.S. population (American Psychological Association; APA, 2010).

With an understanding of the relationship between attitudes toward help-seeking and the role of willingness in predicting actual behavior, it may be that Native American culture-based norms affect the relationship.

Coping Factors in Help-seeking

There are a variety of coping strategies that may be naturally employed during times of distress, such as reaching out to family, friends, or spiritual leaders. Previous literature indicates that motivation to seek psychological help increases when psychological distress exhausts natural coping resources (Cramer, 1999; Cepeda-Benito & Short, 1998). Some research suggests that Native Americans may prefer holistic or spiritual support during times of distress (Beitel, et al., 2013). There are also potentially

harmful methods of coping such as alcohol or drug abuse. Native Americans are the largest population of abstainers in the United States, but alcohol and drug abuse are prevalent public health issues in Native American communities (IHS, *Trends in Health*, 2014). Native Americans with strong cultural beliefs may hold strong supernatural, spiritual, religious, moral theories of emotion and behavior and may prefer the help of spiritual healers to those of Western training (Cheung & Snowden, 1990). This preference may lead to pursuing a traditional line of help first and may impact willingness of Native Americans to seek counseling.

Social Support

Research has found that lower perceived social support predicts intentions to seek counseling (Vogel & Wei, 2005; Liao et al., 2005) and that as perceived social support levels increase, attitudes toward counseling decrease (Vogel et al., 2005). Social support has not been found to be a predictor of attitudes or intentions in help-seeking, (Vogel & Wester, 2003). This is another area where little is known about Native Americans. No research has examined the relationship between social support in Native American populations and help-seeking attitudes or behaviors. As a collectivistic group, Native Americans place high values on family and may use family as a source of support during times of significant stress. In a study with Mexican-Americans, results showed that people with more negative attitudes toward counseling reported high levels of support from their family (Miville & Constantine, 2006).

Psychological Distress and Attitudes Toward Seeking Psychological Help

Research on help-seeking has shown that people endorsing higher levels of psychological distress are more likely to seek professional help (Veroff, Kulka, &

Douvan, 1981), and more likely to utilize professional services (Norcross & Prochaska, 1986). Vogel and Wei (2005) found that people with attachment avoidance are less likely to seek help and those with anxious attachment were more likely to seek help. They also found that perceived social support and psychological distress played mediating roles between intention to seek help from a professional and one's attachment (avoidance or anxiety). Perceived symptom severity positively correlates to an individual's willingness to seek professional help (Robbins & Greenley, 1983) and actual use of services (Norcross & Prochaska, 1986).

Once again, there is a gap in the literature about Native American experiences of psychological distress and help-seeking. Research with other minority groups might inform experiences of Native Americans and psychological services as they related to psychological distress. Hu et al., 1991 found that African Americans who reported receiving psychological help were more likely to have received emergent psychiatric care. It may be that other minority groups have such a crisis-orientation to mental health treatment (*Trends in Indian Health*, Indian Health Services 2014).

Snowden (1999) hypothesized that the reporting of culturally specific psychological symptoms resulted in less stigma and increased help-seeking behavior. This study was conducted with African American participants, but is salient to the present consideration of Native Americans, as they are a group with culture-bound syndromes and symptoms (Hauck, 2013). Snowden (1999) examined “folk” symptoms of anxiety and somatization to determine if such culturally specific symptoms reports impacted help-seeking behavior. The results demonstrated that African Americans who reported,

“culturally sanctioned idioms of distress” reported fewer stigmas associated with help-seeking behavior.

While the research does not exist for Native Americans, results of studies with other minority groups show that there is consistent underutilization of mental health services and this can be attributed to attitudes toward psychological services. Such constructs lay the foundation for the present study and a proposed cultural extension of Cramer’s model of professional help-seeking for psychological reasons.

Historical Issues and the Mental Health Needs of Native Americans

Of the number of modern stressors that cause psychological distress for all Americans, there are unique historical experiences that weigh on the Native American psyche. Historical trauma in the form of relocation, belated citizenship (not until 1924 were Natives recognized as U.S. citizens), the highest rates of poverty (25.9% compared to 7.5% in adult Whites; Miranda, Nakamura, & Bernal, 2003; 32.4% of Native American children live in poverty) with lower socioeconomic status overall are consistently problematic for tribal members. Preventable illnesses (e.g. chicken pox, hantavirus, and West Nile virus) are 1.2 to 6.8 times more likely to affect Native Americans than White Americans (Adekoya, Truman, & Landon, 2015). Religious oppression (the 1978 American Indian Religious Freedom Act allowed traditional practices) has also contributed to negative psychological experiences of Native Americans. Presently, Native Americans have the highest suicide rate (The Aspen Institute, 2015, *Fact Sheet*) at double that of White Americans. Alcohol mortality rates are 514 percent higher than the general American population and alcohol abuse and dependence is the most common psychological disorder among Native men (Beals, et al.,

2006). Posttraumatic stress disorder is the most prevalent psychological disorder for women (Beals, et al., 2006). The national graduation rate for Native American high school students was 47% compared to the national average of 80% (Department of Education, 2015). While only two percent of American children are Native American, an estimated 8.4% of children in the U.S. foster system are Native (NICWA, 2007).

The rationale for providing specified care to Native Americans can be traced to bill H.R.2037: The Native American Psychiatric and Mental Health Care Improvement Act (revised in 2013). A common theme through historical research was the need for mental health services for Natives to address the high rates of alcohol abuse in Native American communities and increased reports of symptoms related to trauma (Gone, 2002). Towards this effort, it was suggested that the Indian Health Services recruit, train, deploy, and professionally support psychiatric and behavioral health professionals in Native American communities. The National Indian Health Board was created in order to help achieve these goals. These were the first steps taken to address the unavailability of mental health services for Native Americans. The American Psychological Association has highlighted mental health disparities for Native Americans (APA, 2003, 2010) to address the mental health needs of Natives and on March 15 of 2016, they hosted a congressional briefing to raise awareness of federal efforts to prevent suicide among Native Americans. By 1992, APA's Ethical Principles of Psychologists' Code of Conduct was revised to include the understanding diversity as an ethical obligation to minority populations (APA, 2002).

Some cultures have a different view of psychiatric symptoms (Alegria et al., 1991). The concept of mental illness for Native Americans varies from geographic

region and place of residence. The UC Davis Center for Reducing Health Disparities (UCDRHD) conducted an in-depth community survey to determine key mental health concerns in Native American communities and found that racism, discrimination, misdiagnosis, and lack of mental health provider's cultural awareness were primary barriers to seeking and using services (UCDRHD, 2009).

Following the Indian Health Care Improvement Act of 1976 (Indian Health Service, Department of Health and Human Services, 1990), many Native American communities utilized funding for traditional healing for mental health services which lead to an understanding of their priorities for mental health care.

Unique Considerations for Native Americans

Native Americans are a heterogeneous group with different tribal beliefs, spiritual practices, languages, and community structures (Manson, 2000; May & Gossage, 2001). The geographic setting and socioeconomic status can vary by tribes or be as diverse as the general population's (Herring, 1999). Historically, Native American students have adopted mainstream cultural values in order to fit into general society (Sanders, 1987) and have experienced more feelings of rejection, anxiety, and depression when compared to non-Native peers (Hulburt, Kroeker, & Gade, 1999).

Culture and Help-Seeking

Cultural factors have increasingly been used to understand psychological service use (Sue, 1999). Cultural values and differences may be in conflict with counseling expectations and may lead to different feelings and thoughts about psychological services (Markus & Kitayama, 1991). The expectation of openly discussing personal issues in the counseling context may be unnatural to Native Americans. Gray and Rose (2011)

reviewed cultural factors important in providing psychological services to Native Americans, such as incorporating Native values and traditions into understanding the individual, family, and community context. Gray and Rose (2012) also highlighted the importance of understanding culture in providing therapy. Culturally influenced models of mental illness can positively affect attitudes toward such services, which affects intentions to seek psychological services (Kleinman, 1980). The present study seeks to compare the attitudes toward seeking professional help by sampling two groups: Diné tribal members living in urban settings and Diné tribal members living in reservation communities, which may differ in cultural values, even among this specific population.

Therefore, it is necessary to consider how a professional model of psychological treatment for psychological issues best serves Diné clients.

Cultural Beliefs about Mental Illness

Culture plays a role in seeking help from mental health professionals, but also influences the cognitive appraisal of psychological problems.

How Diné tribal members attribute mental health may provide insight into whether and where they seek professional mental health care.

Native Americans and coping behavior

Research has shown a need for mental health services in ethnic minority groups, but people identifying as such may be less likely to seek mental health help when compared to White people. Native American youth in psychological distress have been shown to be more likely to go without treatment (Beiser & Manson, 1987), due to limited access to psychological services. Researchers have identified attitudes and perceived barriers as primary factors that impact help-seeking behaviors (Fischer & Cohen, 1972;

Komiya & Eels, 2001; Vogel, Wester, & Larson, 2007; Vogel, Wade, & Hackler, 2007; Vogel & Wester, 2003).

The coping construct is a recurring one in the help-seeking research literature. Coping is conceptualized within two categories: problem-focused (problem-solving) and emotion-focused (regulating emotional responses) coping (Lazarus, 2000). Only one article examined coping variables with Native Americans. Dinges and Joos, 1988 highlighted the lack of research examining coping among Native Americans. Indigenous coping may be more often utilized and exhausted before seeking professional psychological help (Constantine, Myers, Kindaichi, & Moore, 2004). Culture-specific coping may increase with initial psychological distress and may not be utilized in the presence of more severe psychological symptoms. Culture-specific coping strategies may be viewed as ineffective with severe psychological distress, which has been shown to increase motivation to seek professional help (Jorm, Griffiths, Christensen, Parslow, & Rogers, 2004). How Native Americans participate in mental health services is not outlined in the current literature. Knowledge of culture-specific coping strategies can provide insight into how Native Americans seek psychological help. The present study may offer information about culture-specific coping behaviors utilized by a specific tribe of Native Americans. This may lead to an understanding of Native American help-seeking, the impact of culture on coping behaviors, and attitudes toward psychological services.

Urban Versus Rural Help-seeking

The 2010 census data showed nearly 50% of Native Americans live in urban communities and the rest reside in reservation or rural communities. As tribal members

integrate more into urban communities and move away from reservation communities, new considerations need to be made about the mental health treatment of Native Americans. The urbanization of Native Americans started with a large federal program in the 1950s (Hirschfelder & Kriep de Montano, 1993) that was designed to move Native Americans from reservation communities to large urban cities such as Chicago, Los Angeles, Denver, San Francisco, St. Louis, Cincinnati, Cleveland, and Dallas. The Voluntary Relocation Program offered bus tickets and temporary housing to Native relocation volunteers, (Deloria, 1988). Natives Americans have urbanized in part due to federal policies of tribal termination and relocation (Green, 2014). Such experiences have put Natives at risk for psychological problems (Sue & Sue, 2002). The Indian Health Service, which provides the majority of health care to Natives, has allocated only 1% of its funding to urban areas (*Fiscal Year 2016 Congressional Justification- Indian Health Services*), despite 50% of the Native population living in urban areas. Research with rural populations has suggested that residents in such settings report less social support than people who live in urban settings, which may impact help-seeking attitudes and behaviors. Therefore, it is imperative to conduct research that clarifies the mental health needs of rural and urban Natives, particularly when considering the variation of services offered. Hoyt, Conger, Valde and Weihs (1997) offer an in-depth review of the psychological needs of rural America. No such review is available for Native Americans, but some of their findings are relevant for the present study. Hoyt, et al. (1997) found that women did not demonstrate significant psychological distress when compared to men in rural settings. Men demonstrated significantly greater increases in depressive symptoms than men in larger towns or cities, and these men also held more stigmatized

attitudes toward mental health care. These views were strongly predictive of willingness to seek such services. Hoyt, et al., (1997) called for assistance for men in rural communities due to these findings.

Practical and Emotional Barriers to Help-seeking

Many studies have explored the obstacles to psychological services for a number of populations (Kasper, 2000; Robert & Hourse, 2000). In comparison, one study has comprehensively examined obstacles to psychological services among Native Americans (Duran et al., 2005). Duran et al. (2005) found common obstacles to psychological treatment included negative social support, instrumental social support, utility of therapists, utility of medical doctors, treatment type, diagnosis of an anxiety disorder, and tribe. Additionally, people utilizing mental health services through their tribe or Indian Health Services reported concerns about confidentiality and receiving treatment in settings where their friends or relatives worked. Differences in tribes were attributed to cultural variations. Specifically, Duran et al. (2005) found that Northern Plains' tribes displayed greater treatment-seeking options, which was attributed to the individualistic notions of self that Northern Plains endorse.

Culturally Based Help Seeking Model

Cramer (1999) investigated the relationships among social support, self-concealment, level of distress, and attitudes toward counseling with help-seeking behavior through path analysis with a primarily white undergraduate population. The path modeling allowed for a unique understanding of the effect of each variable on help-seeking attitudes and intentions. These results indicated that the likelihood of seeking counseling increased when participants had positive attitudes toward counseling and

attitudes were a better predictor of intentions than psychological distress. Additionally, self-concealment was a stronger predictor of psychological distress than social support.

As previously noted, Liao et al., (2005) hypothesized that there were other variables in Cramer's (1999) model that were relevant to minority populations (behavioral acculturation and adherence to group cultural values). Liao et al. (2005) found that acculturation variables significantly added to the prediction of attitudes to counseling which also predicted willingness to seek counseling. While this research was conducted with Asian Americans, it provides information about help-seeking and the variables that influence help-seeking for a minority population.

Due to these findings, the model developed by Cramer (1999) will serve as a basis for a model of help-seeking attitudes and behaviors in Native Americans. Modeling help-seeking on Cramer's foundational model will establish a basis for understanding important variables in predicting the help-seeking behaviors for Native Americans.

Summary

The manner in which Native Americans seek and engage in mental health services seems to be possibly influenced by cultural factors. It is important to understand the patterns of help-seeking in Native American communities. Research with Native Americans has suggested a preference for traditional interventions and reports of significant barriers to counseling. Expanding the understanding of help seeking behaviors in Native American populations (reservation-dwelling and urban-dwelling) will contribute important information to the existing literature.

CHAPTER 3:

METHODOLOGY

This chapter provides an overview of the recruitment and administration procedure, an overview of the sample, a review of instruments used, and an outline of statistical analyses.

Participant Recruitment

Self-identified Diné tribal members were recruited for participation in this study. Those who did not identify as Diné, were not living in American reservations or urban communities, or were younger than 18 years of age were not be eligible to participate. Participants were sought through convenience and snowball sampling. The study survey was posted to social media (Facebook) and psychology listservs (Division 17 and 45), and emails were sent to interested community members. Prospective participants were invited to participate in a research project that was described as a study exploring Diné attitudes toward counseling. Those who wanted to participate were directed to complete an electronic Internet survey through Qualtrics.com. Participants who completed the survey were invited to enter a drawing to win one of ten \$25 Amazon gift cards (a dissertation grant was awarded by the University of Denver Counseling Department), and the rewards were distributed when the sample size for the study was achieved.

Prior to completing the online questionnaire, all participants were asked to review an information letter and consent form outlining the research. Consent was obtained by

participant authorization via a response option on the electronic form indicating understanding and agreement to the terms of the current project. All participants were given the option to obtain an emailed copy of the letter and consent form for their personal records. After completing the questionnaires, participants were thanked and invited share their email to enter the gift card drawing.

The University of Denver institutional research board (IRB) approved the recruitment of participants and administrative procedures. Conducting research on Native American Reservation lands requires unique considerations and protocols. Native American reservations are sovereign lands with cultural and legal issues that can differ than the rest of the United States. Each Tribe and Nation has specific requirements for research. In some cases, a letter from the Tribal Council may be sufficient. Others require the approval of the tribal IRB. For example, the present project was conducted with Navajo tribal members. The Navajo Nation has developed its own detailed research process and has their own IRB: the Navajo Nation Human Research Review Board (NNHRRB). The NNHRRB requires researchers to follow their IRB Research Protocol Application Guidelines for research conducted anywhere on the Navajo reservation involving tribal members. The Procedural Guidelines for Principal Investigators outlines the phases of the NNHRRB application and the IRB Research Protocol Application outlines each element of the table of contents. The documents required are (in order):

- A. Cover sheet of the IRB Research Protocol Application (NNHRRB-01)
- B. Abstract of the research project
- C. Part 1: Community Involvement
- D. Part 2: Benefits to the Navajo Nation

- E. Part 3: Research Project Description
- F. Part 4: Informed Consent Document
- G. Part 5: Certification by the Principal Investigator
- H. Part 6: Attachments
 - a. Curriculum Vitae of the Principal Investigatory/Co-Principal Investigator
 - b. Approving Resolutions from Agency Councils of the Navajo Nation
 - c. Support letters from the CEOs of NAIHS service units and Navajo Nation program directors
 - d. Copies of other approved IRB letter(s)
 - e. Certificate of confidentiality (if necessary)
 - f. OMB clearance document (if necessary)
 - g. A copy of the written letter to the Navajo Nation Historical Preservation office (if applicable)
 - h. Budget

Ten (10) copies of the research proposal was to the IRB Office one month prior to the date of presentation. For the current project, submission to the NNHRRB was April 15, 2017 with presentation of the research proposal at the NNHRRB meeting in Window Rock, Arizona on May 16, 2017. The project was tabled due to requiring full project approval from the University of Denver IRB before considering the NNHRRB package complete. Full approval from the University of Denver IRB was awarded on June 30, 2017. Full approval from the NNHRRB was granted on July 21, 2017.

Participants

The sample consisted of 119 participants who were 18 years of age or older. The sample size was based on achieving power of .80 or greater. The participants indicated that one of their parents were of Diné descent and questions were asked to determine biracial or multiracial identity. Participants were asked if they were born on a Native American reservation and where they currently resided. Information about the highest level of education obtained was gathered. Participants were asked about household income. A question was asked about generational status (what generation was born on a Native reservation, if known). First generation status indicates born off a reservation, but now living on a reservation; 2nd generation status indicates born on a reservation and at least one parent was born off a reservation; 3rd generation status indicates born on a reservation and at least one parent was born on a reservation; beyond third generation indicates born on a reservation and at least one grandparent who was born on a reservation. Instruments to be used in the present study followed these demographic questions. Nearly all participants completed the survey in less than 16 minutes.

Measures

Participants were administered an online questionnaire consisting of: The Native American Acculturation Scale (NAAS), Intentions to Seek Counseling Inventory (ISCI), Attitudes toward seeking professional psychological help scale-short form (ATSPPHS-SF), The Patient Health Questionnaire-9 (PHQ-9), and Barriers to Access to Care Evaluation, version three (BACE-3).

Native American Acculturation Scale (NAAS; See Appendix A)

The NAAS (Garrett & Pichette, 2000) is an acculturation scale modeled on the Acculturation Rating Scale for Mexican Americans (ARSMA; Cuellar et al., 1980) and the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Harris & Jasso, 1980). ARSMA and SL-ASIA items were revised to reflect Native American culture. The 20-item Native American Acculturation Scale (Garette & Pichette, 2000) is the only validated acculturation scale for Native Americans. Scoring of the NAAS uses a Likert-type coding scale from 1 to 5. On this scale, endorsement of ‘1’ on an item indicates less acculturation, stronger Native identity, where ‘3’ indicates a bicultural identity, and ‘5’ indicates more acculturation/assimilation with a White identity. Results from a series of exploratory factor analyses conducted by Reynolds et al. (2012) determined that the NAAS is comprised of three factors (subscales): Core Self (8 items), Cultural Self Expression (5 items), and Cultural and Community Engagement (7 items). The Core Self is comprised of items relating to where a person grew up, contact with other Native Americans, and parental Native identity. High scores on the Core Self subscale indicate someone is less likely to have Native culture central to who they are and low scores on Core Self indicate less acculturation and a stronger connection with their Native self. The Cultural Self Expression subscale is comprised of items relating to how one uses English or tribal language to express themselves or reflect on their experiences. Higher scores on the Cultural Self Expression subscale indicate that a person is more likely to think, speak, write, and feel using English, while lower scores on this subscale indicate use of their native language for these experiences. The Cultural and Community Engagement subscale is comprised of items that reflect engagement and pride in their

Native culture. Higher scores indicate someone may be more aligned with White culture and less likely to take pride or engage in their Native culture, while low scores indicate someone is more likely to be involved in their native culture and have a stronger identification as Native American. The NAAS has multiple-choice items that comprise six subscales: language, identity, friendships, behaviors, generational/geographic background, and attitudes (Garrett & Pichette, 2000). Questions include, “In what language do you think,” and “Do you participate in Native American traditions, ceremonies, occasions, and so on?” Scores range from 1 (low acculturation with high Native American identity) to 5 (high acculturation and low Native American identity). A score of 3 indicates an individual’s identification as bicultural. The answers for all 20 items are summed and divided by 20 (total items) and the mean score serves as the acculturation score. Garrett and Pichette (2000) found an alpha coefficient of .91 with a sample of high school students and Ecklund (2005) reported an alpha of .90 for a college student sample. Reynolds et al. (2012) used exploratory factor analysis to identify three dimension of Native American acculturation: Core Self (e.g. Item 13: “What contact have you had with Native American communities?”), Cultural Self-Expression (e.g. Item 15: “In what language do you think?”), and Cultural and Community Engagement (e.g. Item 8: “Who do you associate now with in your community?”). Confirmatory factor analysis supported the structural validity of a three-factor model as well as a higher order dimension of broad Native American acculturation.

Reynolds et al. (2012) conducted their study with two college student samples with diverse tribal representation. The three factors they identified were assessed in the present study.

Intentions to Seek Counseling Inventory (ISCI; See Appendix B)

The ISCI (Cash, Begley, McCown, & Weise, 1975; Cepeda-Benito & Short, 1998; Kelly & Achter, 1995) was used to assess participants' willingness to seek professional counseling in the future. The ISCI is a 17-item scale. Participants rate how likely they would be to seek counseling if experiencing a listed issue, with responses on a 6-point scale, ranging from "very unlikely" to "very likely." The total score ranges from 17 to 102, with higher scores indicating higher intentions of seeking counseling in the future and is correlated with willingness to seek services when needed. Domain areas and internal consistency reliabilities were found through factor analysis: Psychological and Interpersonal Problems (.90), Academic Problems (.71), and Drug Use Problems (.86). Sample items include: "Weight control," and "Relationship Difficulties," (from the Psychological and Interpersonal Problems subscale); "Drug problems," and "Excessive Alcohol Use," (from the Drug Use Problems subscale); "Test anxiety," and "Academic Work Procrastination," (from the Academic Problems subscale). Morgan et al. (2003) reported an internal consistency alpha of .88 with a sample of primarily ethnic minority group members. Internal consistency for studies including predominantly white samples have ranged from .84 to .90 (Cepeda-Benito & Short, 1998; Kelly & Achter, 1995). Factor analysis yielded a three-factor solution, which represented Psychological and Interpersonal Concerns (10 items, $\alpha = .90$), Academic Concerns (4 items, $\alpha = .71$), and Drug Use Concerns ($\alpha = .86$), with the 'weight control' item not loading on any of the

three factors (Cepeda-Benito & Short, 1998). There are no empirical reports of the ISCI's psychometric properties among Native Americans. However, the decision to utilize the ISCI for the present study is based on reports of good psychometric properties with other minority groups and to maintain consistency with Cramer's (1999) model. For the present study, the following modification were made: the three ISCI items that are specific to academic concerns were excluded in order to generalize the measure to a community and student population that will comprise the present study's sample.

Patient Health Questionnaire, (PHQ-9; See Appendix C)

Psychological distress was evaluated using the PHQ-9 (Kroenke & Spitzer, 2002). The PHQ-9 is a nine-item universal screening measure that evaluates symptoms of depression. For the present study, the PHQ-9 was utilized due to its reliable measure of psychological distress. If participants reported at least five of the nine symptoms, they were considered to be in moderate distress. The PHQ-9 is supported as a tool to distinguish between adjustment concerns, minor depression, major depression, and dysthymia. It can also be used to monitor response to treatment over time. Participants rank how often they have been bothered by such experiences as, 'Little interest or pleasure in doing things,' and 'Trouble concentrating on things, such as reading the newspaper or watching television.' The rating is '0- not at all,' '1-Several days,' '2-More than half the days,' and '3-Nearly every day.' The PHQ-9 is the primary screening tool used by IHS. According to the Urban Indian Health Institute (2012), the PHQ-9 is utilized primarily as a basis for referral to mental health professionals and to reduce the delay in treatment of Native Americans. Dillard, Smith, Ferucci, and Lanier (2012) conducted a study with the PHQ-9 in an Alaska Native sample. The mean PHQ-9 scores

in their study was 4.8. Reliability and validity information was not reported for this population. Validity and reliability with a Chinese college sample (Zhang et al., 2013) was reported as internal consistency of the PHQ-9 was reported as Cronbach's alpha = 0.854. The test-retest reliability of the PHQ-9 was 0.873.

Barriers to Access to Care Evaluation, version three (BACE v3; see Appendix D)

The BACE v3 is a 30-item scale including a treatment stigma subscale and 12 non-stigma-related items (Clement et al., 2012). The BACE v3 was developed through a detailed process of scale development that reduced 172 barrier items to the current 30. The BACE v3 is used to identify key barriers to care experienced by individuals who have used or currently use mental health services. Participants indicate whether each BACE v3 item has ever stopped, delayed or discouraged them from obtaining or continuing professional mental health care of a psychological problem by answering: not at all (0), a little (1), quite a lot (2), or a lot (3). Preliminary evidence indicated adequate reliability, validity and test-retest reliability, and internal consistency. The majority of BACE items had weighted kappa values from 0.61 to 0.80 suggesting agreement between test and retest. The treatment stigma subscale had a Cronbach's alpha of 0.89 (Clement et al., 2012). As stigma was not a construct of interest in the present study, stigma-related items were excluded, leaving 12 items for this measure.

Attitudes toward seeking professional psychological help scale- short form

(ATSPPH-SF; see Appendix E)

The ATSPPH-SF (Fischer & Farina, 1995) is a 10-item self-report measure that assesses an overall belief in counseling value, in particular the value of counseling as being helpful for emotional and personal problems. Ang et al. (2007) verified the factor

structure of a nine-item short form of the ATSPPH-SF with confirmatory factor analysis (CFA). Participants were directed to rate items using a response scale ranging from 0 (disagree) to 3 (agree). Higher scores indicate more favorable attitudes to seeking psychological help. The total score is calculated and ranges between 0 and 30. Coefficient alpha for scores on the ATSPHH-SF has been reported at 0.71 (Fischer & Farina, 1995). Price and McNeill (1992) used the full version of the ATSPPHS with a Native college population. They did not report Cronbach's alphas for the population but reported expected gender differences, with females scoring higher than males.

Data Analysis

Significance, Power, Effect Size, and Sample Size

To establish a 95% confidence interval and a 5% maximum risk for a Type I error in this study, the significance criterion (α) was set to .05 ($\alpha = .05$) for all statistical analyses. Several of the measures in the study have shown different mean scores based on gender and race. Mean scores were compared within the sample for this study. 18 t-tests of independent samples were performed to compare mean scores within the sample for this study. Two Analysis of Variance procedures and a multiple regression were performed to analyze the data in this study. This made for a total of 21 statistical tests using data from this sample. By dividing the overall alpha level for the study by the number of tests performed, an alpha level of .002 was created for all statistical tests and maintained an overall significance level of .05.

A power analysis was conducted to determine the required sample size (Cohen, 1988 & 1992). Fritz and Mackinnon (2007) suggested that sample sizes required for tests of mediation with at least 80% power are dependent upon the mediation test used as well

as anticipated effect sizes for each path coefficient. According to Fritz and MacKinnon's (2007) power estimates using bias-corrected bootstrapping procedures, power should be sufficient to detect a mediation effect where both *a* and *b* path coefficients are equal to or above the small-medium effect size of .26 for the full sample. Power calculations indicated a sample size of 118 was needed to reach a power of 0.8 (Fritz & Mackinnon, 2007).

The sample size for the multiple regression was based on the number of predictor variables in the model (6); the alpha level set for the statistical analysis; power of .80; and an effect size of .15.

The Missing Values Analysis function in SPSS was used to evaluate patterns of missing data. Little's missing completely at random (MCAR) test will indicate if data are MCAR.

Data were assessed for multivariate normality. To check for multivariate outliers, this researcher examined Mahalanobis distances for each case (Tabachnick & Fidell, 2001). Outliers observed at $p < .001$ and were dropped from subsequent analysis.

While structural equation modeling (SEM) has been noted as the favored method for testing mediation in counseling psychology (Frazier, Tix, & Barron, 2004), the smaller sample size ($N=119$) achieved for this study required a different approach. To assess whether attitudes toward counseling mediated the direct association, a bootstrapping procedure using the PROCESS macro for SPSS (Hayes, 2012) was conducted using 10,000 resamples. In this approach, the effects were assessed with bias corrected bootstrap confidence intervals that are considered significant if the upper and lower bound of the confidence intervals (95%) do not contain zero (Hayes, 2012).

Mediation was assessed by the indirect effect of the independent variables on the dependent variable, through the mediator (Figure 1). Criteria established by Hayes (2012) were used to determine significance of mediation, using bootstrapping procedures.

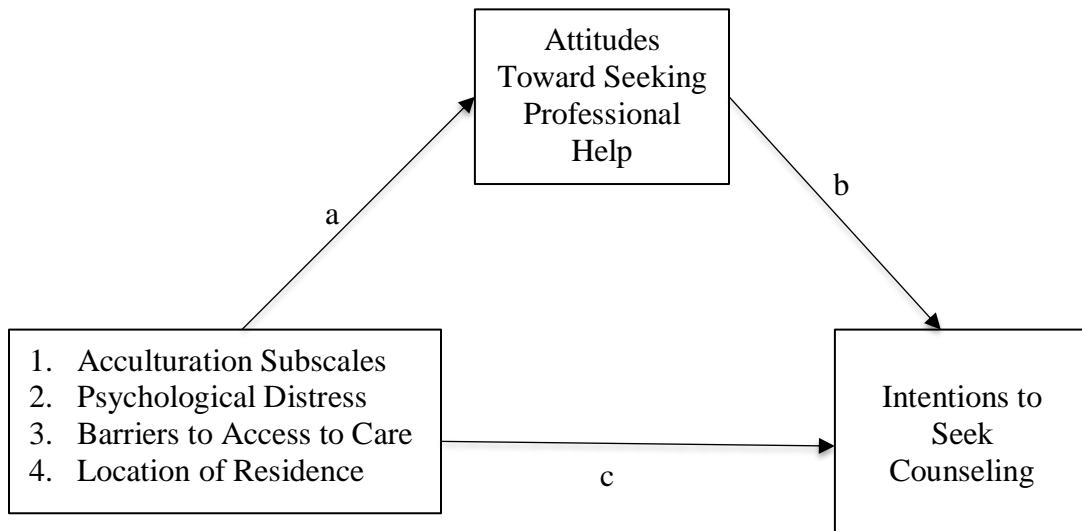


Figure 1. Hypothesized mediation model.

Bootstrapping was used to conduct tests of mediation. A total of 10,000 bootstrap samples was generated with AMOS 22.0 for each test of mediation. Bias-corrected 95% confidence intervals (CIs) were examined for mediation effects. Statistically significant CIs that did not contain zero were deemed a significant mediation effect (Mallinckrodt, Abraham, Wei, & Russell, 2006). Significant indirect effects were explored.

Summary

This chapter was a report of the results of statistical analysis conducted to answer the research questions in this study. There were significant and non-significant results from the analysis.

CHAPTER FOUR:

RESULTS

The goal of this study was to address the gaps in the literature pertaining to research with Native Americans. This study was conducted with a sample of Diné tribal members. The study had three objectives: (a) to determine if psychological and cultural variables predict help-seeking attitudes in a Diné sample; (b) to assess whether attitudes predict willingness to seek counseling in a Diné sample; and (c) to determine if one's attitudes toward seeking psychological help explain the relationship between psychological and cultural variables and willingness to seek counseling in a Diné sample. A larger objective of this study was to provide context for a foundation of Diné help seeking attitudes and behaviors.

This chapter will present and discuss the findings from statistical analyses conducted. First, a brief review of the data, descriptive statistics of the participant variables, and the key study variables are summarized and presented. The chapter then reviews the findings from preliminary statistical analyses and tests of assumptions and covariates for multivariate analysis. Each research question is addressed and summarized at the end of the chapter. Tables and figures are provided for illustration of findings.

Data Preparation

Participants completed the study via an online survey through Qualtrics. Seven study participants completed a paper form of the survey. Survey data was downloaded

directly from Qualtrics or manually entered into an SPSS 24.0 data file and examined for entry errors as well as missing data. Twenty-four cases were deleted due to missing demographic information. Missing data analyses revealed an additional six cases with more than 50% missing values and these cases were also deleted. Following deletion of these cases, no other missing values were observed.

Study Participants

The final sample consisted of 119 Diné tribal members. Approximately 57% were born on a reservation, with 70% currently living in a non-reservation community (either rural, non-reservation or urban). The demographic descriptive statistics are presented in Table 1.

Table 1.

Demographic Characteristics of the Sample (N = 119)

<i>Variable</i>		<i>n</i>	<i>%</i>
Gender	Male	30	25.2
	Female	83	69.7
	Transgender male	1	0.8
	Transgender female	2	1.7
	Gender variant/non-conforming	3	2.5
Age	18 -24 years old	21	17.6
	25-34 years old	39	32.8
	35-44 years old	27	22.7
	45-54 years old	20	16.7
	55-64 years old	7	5.9
	65-74 years old	4	3.4
	75 years or older	1	0.8
Education	Some high school, no diploma	1	0.8
	High school graduate, diploma or equivalent	8	6.7
	Some college credit, no degree	26	21.8
	Trade/technical/vocational training	7	5.9
	Associate degree	19	16.0
	Bachelor's degree	23	19.3
	Master's degree	28	23.5
	Professional degree	1	0.8
	Doctorate degree	6	5.0

Household Income	Less than \$20,000	20	16.9
	\$20,000 to \$34,999	24	20.3
	\$35,000 to \$49,999	13	11.0
	\$50,000 to \$74,999	23	19.5
	\$75,000 to \$99,999	15	12.7
	Over \$100,000	23	19.5
Current Residence	Reservation	35	29.4
	Rural, non-reservation	16	13.4
	Urban	68	57.1
Location of Birth	Reservation	68	57.1
	Rural, Native community	10	8.4
	Urban, Native community	3	2.5
	Urban or Rural, near Native community	17	14.3
	Urban or Rural, away from Native community	21	17.6

Preliminary Analyses

Instruments used in this study measured: attitudes toward psychological help seeking (Attitudes Toward Seeking Professional Psychological Help, ATSPPH; Fischer & Farina, 1995), intentions to seek counseling (Intentions to Seek Counseling Inventory, ISCI; Cash, Begley, McCown, & Weise, 1975, Cepeda-Benito & Short, 1998, and Kelly & Achter, 1995), Native American acculturation (Native American Acculturation Scale, NAAS; Garrette & Pichette, 2000, Reynolds et al., 2012), barriers to care (Barriers to Care Evaluation, version three, Clements et al., 2012), psychological distress (Patient Health Questionnaire-9, PHQ-9; Spitzer, Kroenke, & Williams, 1999) and alcohol use (Alcohol Use Disorders Identification Test - Consumption, AUDIT-C; Bush et al., 1998). Descriptive statistics for the instruments, including Cronbach's alphas, are presented in Table 2.

Table 2.

Descriptive Statistics and Cronbach's Alphas for Study Variables

	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Total Scale Range</i>	<i>α</i>
NAAS Total	52.48	11.48	31	86	0 – 40	.86
NAAS CS	16.66	7.22	8	39	0 - 40	.81
NAAS CSE	15.95	3.17	7	20	0 - 25	.83
NAAS CCE	19.87	3.69	14	33	0 - 35	.71
BACE Total	21.39	19.14	0	90	0 - 90	.94
ISCI Total	41.07	11.49	17	66	0 - 68	.92
ATSPPH Total	20.83	5.32	9	30	0 - 30	.76
PHQ-9 Total	4.87	5.15	0	27	0 - 27	.89
AUDIT-C Total	1.45	1.78	0	7	0 - 12	.70

Note. *N* = 119

The mean of the NAAS Core Self subscale was 16.66 ($SD = 7.22$) with a maximum possible score of 40. This indicated that participants in this sample had a more bicultural core self-identity. The range for the Core Self subscale was 8 to 39, which is relatively aligned with the possible range of 0 to 40. The mean of the NAAS Cultural Self Expression subscale was 15.95 ($SD = 3.17$). The range for the Cultural Self Expression subscale was 7 to 20, with a possible range of 0 to 25. The mean for this scale indicated moderately low levels of acculturated self-expression. A low score indicates participants are more likely to reflect on their experiences (thinking, speaking, writing, feeling) in their native language than English, which is how they experience their culture. The mean of the NAAS Cultural and Community Engagement subscale was 19.87 ($SD = 3.69$) with a maximum possible score of 35. The range for the Cultural and Community Engagement subscale was 14 to 33, which indicated this sample may engage less in their Native cultural and community activities. The total NAAS mean score was

52.48 ($SD = 11.48$) and the range of scores was 31 to 86 points, indicating participants in this study experienced moderate levels of acculturation.

The mean of the BACE was 21.39 ($SD = 19.14$) with a maximum possible score of 90. This indicated that participants in this sample reported low to moderate levels of barriers to professional care. The score range for the BACE in this study was 0 to 90, which is consistent with the possible range of 0 to 90.

The mean of the ISCI was 41.07 ($SD = 11.49$), with a maximum possible score of 68. This indicated that participants in this sample had low to moderate intentions to seek counseling. The range for the ISCI was 17 to 66, with a possible range of 0 to 68.

The mean of the ATSPPH was 20.83 ($SD = 5.32$), with a maximum possible score of 30. This indicated that participants in this sample trended toward more positive attitudes toward seeking professional psychological care.

The mean of the PHQ-9 was 4.87 ($SD = 5.15$), with a maximum possible score of 27. This indicated that participants in this sample had low levels of psychological distress. One participant did score the maximum.

The mean of the AUDIT-C was 1.45, with a maximum possible score of 12. This indicated that participants in this sample had low levels of alcohol consumption. In fact, 43% of participants reported never having a drink containing alcohol.

Testing of assumptions. Statistical assumptions for regression analysis were assessed based on recommendations by Hayes (2013), Hayes and Preacher (2010), and Field (2013). To minimize error, the relation between predictor and criterion variables should be linear (Hayes, 2013). To examine linearity, each mediation test was broken down into multiple regressions, and each regression was assessed for the assumption of

linearity. Residuals were plotted against predicted values in four regressions: X predicting Y (c), X predicting M (a), M predicting Y (b), and X and M predicting Y (bc').

A series of regressions were run and all associations met assumptions of linearity.

Across all predicted Y values, estimated errors should be nearly equal. If not, then there would be heteroscedasticity, which would affect the standard error of the regression coefficients (Hayes, 2013). To check homoscedasticity, the same plots for linearity were examined. The data appear to spread consistently with a constant vertical range (Figure 2).

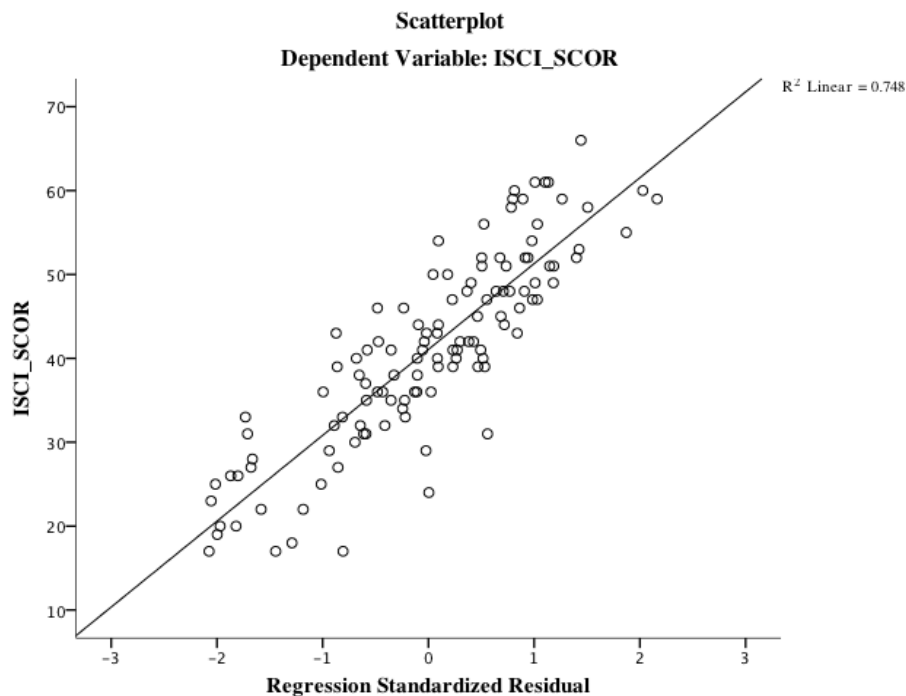


Figure 2. Using the multiple regression standardized predicted and residual values (the influence of independent variables and attitudes toward seeking professional help on intentions to seek professional help) to check linearity and homoscedasticity assumptions.

Cronbach's alphas were examined to test the assumption that variables are measured without error (Tavakol & Dennick, 2011). Cronbach's alphas were computed

for the subscales (NAAS) and total scales are reported in each corresponding descriptive table. As seen in Tables 2 through 7, the Cronbach's alphas ranged from .70 on the AUDIT-C (good), to .94 on the BACE (excellent). Due to the good to excellent Cronbach's alphas for the subscales and total scales, the assumption that variables were measured without error was met. To examine the assumption that error should be normally distributed, Q-Q plots were created with residuals. The data indicated normality.

The assumption of normality for the subscales and total scales was tested by using histograms, skewness, kurtosis, and inspecting normality probability plots. The indices for acceptable limits of +2 or -2 were used (Trochim & Donnelly, 2006; Field 2000 & 2009; Gravetter & Wallnau, 2014). Scores on the ISCI ranged from 17-66, with skewness of -.162 ($SE = .222$) and kurtosis of -.549 ($SE = .440$). BACE scores ranged from 0-91, with skewness of 1.09 ($SE = .222$) and kurtosis of 1.03 ($SE = .440$). PHQ-9 scores ranged from 0-27, with skewness of 1.56 ($SE = .222$) and kurtosis of 2.80 ($SE = .440$). ATSPPH scores ranged from 9-30, with skewness of -.092 ($SE = .222$) and kurtosis of -.697 ($SE = .440$). NAAS Core Self scores ranged from 8-39, with skewness of .959 ($SE = .222$) and kurtosis of .478 ($SE = .440$). NAAS Cultural Self Expression subscale scores ranged from 7-20, with skewness of -.865 ($SE = .222$) and kurtosis of .495 ($SE = .440$). NAAS Cultural Community Engagement subscales scores ranged from 14-33, with skewness of .705 ($SE = .222$) and kurtosis of .403 ($SE = .440$).

Independent Variables

Table 3 presents the Pearson bivariate correlations for the demographic variables, subscales, and total scales of measures used in the study. As expected, attitudes toward

help seeking were significantly correlated with intentions to seek psychological help ($r = .437, p < .01$). These correlations were in the expected direction with more positive attitudes associated with higher intentions to seek help. Income ($r = .200, p < .05$), education ($r = .309, p < .01$), and where one currently lives ($r = .251, p < .01$) had a positive significant correlation with attitudes toward seeking professional help. This positive relationship suggests that the more education one has, the higher one's income, and living in a non-reservation community is related to more positive attitudes toward seeking professional help. Two of the acculturation subscales, Core Self ($r = .347, p < .01$) and Community Engagement ($r = .182, p < .05$) as well as the acculturation total scale ($r = .326, p < .01$) were positively correlated to current community. This indicates that one's current residential location may lead to higher levels of acculturation and acculturated identity. Specifically, living off the reservation leads to higher scores on acculturation. Acculturation Self Expression was not significantly correlated with any variables.

Psychological distress was positively associated with perceived barriers to care ($r = .630, p < .01$) indicating that the more barriers an individual experiences, the more psychological distress they reported. In contrast, psychological distress had a significant negative correlation with attitudes toward seeking professional help ($r = -.279, p < .01$), suggesting that the more psychologically distressed someone is, the less positive attitudes toward seeking professional help they reported. Education had negative correlations with psychological distress ($r = -.310, p < .01$), suggesting that participants with more education reported less psychological distress. Education was positively correlated with attitudes toward counseling ($r = .309, p < .01$), indicating that participants with more

education held more positive attitudes toward counseling. Income was negatively correlated with psychological distress ($r = -.355, p < .01$) and barriers ($r = -.315, p < .01$) indicating that the higher one's income, the fewer experiences of psychological issues or barriers. Gender was not significantly correlated with any of the study variables.

The NAAS subscales were significantly correlated with one another at $p < .01$ and with the total NAAS score at $p < .05$. The Variance Inflation Factors (VIFs) across all scales ranged from 1.03 (ISCI) to 1.69 (PHQ-9), well below the level of multicollinearity. Opinion varies on the maximum level of VIF, with some recommending values no higher than 10 (Hair et al., 1995) and others recommending values no higher than 5 (Ringle et al., 2015). The VIF values across all scales in this study met the more conservative limit of 5. Moreover, the VIFs were less than two between the NAAS subscale and NAAS total scores, with Core Self at 1.41, Self-Expression at 1.65, and Community Engagement at 1.40. These findings demonstrate that the assumption of multicollinearity was met for all scales.

Table 3

Correlations among Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. CURR LIV	---	.015	.133	.179	.155	.347**	.177	.182*	.326**	-.092	.051	-.043	.251**	.136
2. AGE		---	-.023	.408**	.436**	-.030	-.117	.147	-.004	-.385**	-.159	-.236**	.067	-.164
3. GENDER			---	.027	.067	.180	.070	.049	.148	.109	.086	-.042	.139	.126
4. EDUC				---	.561**	.134	.100	.084	.139	-.310**	.201*	-.168	.309**	.130
5. INCOME					---	.129	.017	.114	.122	-.355**	.154	-.315**	.200*	.025
6. ACC CS						---	.524**	.373**	.894**	-.007	.042	.003	.169	.031
7. ACC SE							---	.516**	.772**	.031	.099	-.042	.117	-.070
8. ACC CCE								---	.699**	-.061	.058	-.051	.010	-.142
9. ACC TOT									---	-.015	.073	-.026	.142	-.046
10. PHQ9										---	.056	.630**	-.279**	.040
11. AUDITC											---	.036	.034	-.011
12. BACE												---	-.239**	.066
13. ATT													---	.437**
14. ISCI														---

Note. CURR LIV = Current community; ACC CS = Acculturation Core Self; ACC SE = Acculturation Cultural Self Expression; ACC CCE = Acculturation Cultural Community Engagement; PHQ-9 = Psychological Distress; AUDIT-C = Alcohol Use; BACE = Barriers to Care; ATT = Attitudes toward seeking professional psychological help; ISCI = Intentions to seek psychological help.

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

Primary Analyses

The PROCESS macro (Hayes, 2013) for SPSS 24.0 (IBM Corp., 2015) was used to examine the relation between acculturation, barriers, psychological distress, current location of residence and intentions/willingness to seek counseling. Figure 2 depicts the mediation model that was tested. The mediator (M ; attitudes) was hypothesized to explain the relationship between the predictor variables (X ; current residence, barriers, psychological distress, Core Self, Self Expression, and Engagement) and the criterion variable (Y ; intentions to seek counseling).

That is, acculturation (three subscales), barriers, psychological distress, and current location of residence were each hypothesized to predict attitudes (a), which in turn was hypothesized to predict intentions to seek counseling (b). This is the indirect effect (ab) of independent variables on intentions to seek counseling. This indirect effect was obtained by multiplying the two effects (a and b) associated with this pathway (Hayes, 2013). The direct effect (c'), or association between predictor variables and intentions to seek counseling while keeping attitudes constant (Rucker et al., 2011), was also calculated. The total effect was calculated by combining the direct and indirect effects (c), and represents the coefficient obtained by regressing intentions on each of the independent variables (Hayes, 2013; Rucker et al., 2011). The coefficients associated with each pathway (a , b , ab , c' , and c) are unstandardized regression coefficients.

If the indirect effect in a model is significant, this indicates either partial or full mediation. If the direct effect is not significant, then there is complete mediation, with the effect of X on Y being fully accounted for by M . If the direct effect remains significant, then M does account for part of the relation between X and Y , but X predicts Y in the presence of M , which indicates partial mediation (MacKinnon et al., 2007).

Bootstrapping was used to test the significance of indirect effects (Hayes, 2013). At the recommendation of Hayes (2013) 10,000 bootstrap samples were used to determine the lower and upper bounds of 95% bias-corrected confidence intervals (CI). CI's that did not include zero were considered statistically significant.

Multiple regression

Multiple linear regression was performed to test the study hypotheses. Figure 3 illustrates the simple mediation model tested in the study.

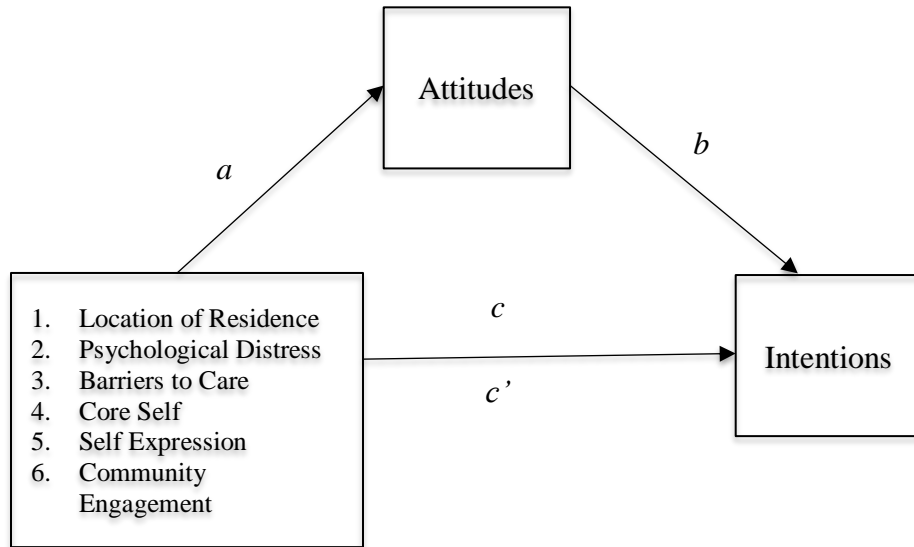


Figure 3. Simple Mediation. Note: a is effect of independent variables on attitudes; b is effect of attitudes on intentions to seek counseling; c' is the direct effect of the independent variables on intentions to seek counseling; and c is the indirect effect of the independent variables on intentions to seek counseling.

Model 1. Regression analysis was used to investigate the hypothesis that one's attitudes toward seeking professional help mediates the effect of one's current location of residence on their intentions to seek counseling. Results (see Figure 4) indicated that participants living in a non-reservation community reported more positive attitudes toward seeking psychological help ($b = 2.91$, $t(117) = 2.81$, $p < .01$) and more positive attitudes were subsequently related to greater intentions to seek counseling ($b = .929$, $t(117) = 4.99$, $p < .001$). These results support the mediational hypothesis. Location of residence was no longer a predictor of intentions to seek counseling after controlling for the mediator, attitudes toward seeking professional help, ($b = 3.41$, $t(117) = 1.49$, $p > .05$), which is consistent with full mediation. Approximately 20% of the variance in intentions to seek counseling was accounted for by the predictors, $R^2 = .192$, $F(1, 117) = 13.77$, $p < .001$. The results of a bootstrap estimation indicated the indirect coefficient

was significant, $b = 2.71$, 95% CI = .846 to 5.02. Living in a non-reservation community was associated with approximately 2.71 points higher on the intentions to seek counseling measure as mediated by attitudes toward seeking professional psychological help.

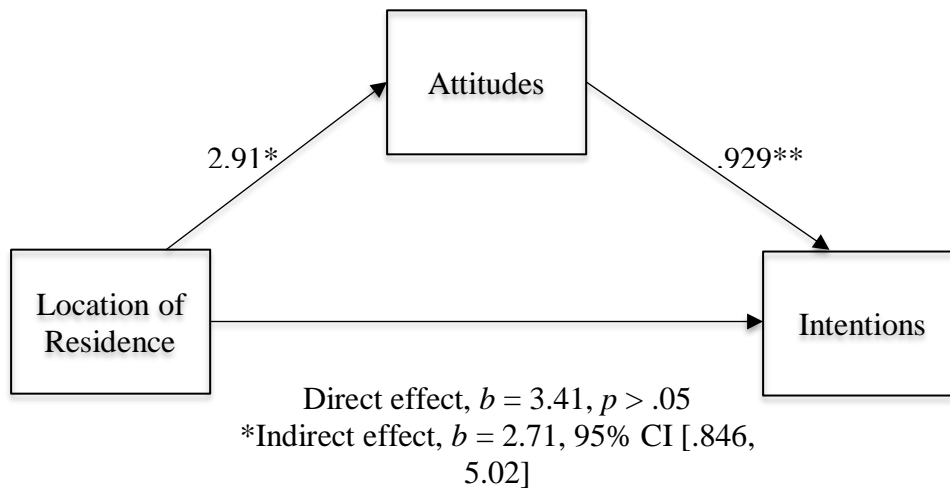


Figure 4. Model 1 with unstandardized beta weights.

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

Model 2. Regression analysis was used to investigate the hypothesis that attitudes toward seeking professional help mediate the effect of psychological distress and intentions to seek counseling. Results (see Figure 5) indicated that participants reporting higher levels of psychological distress had less positive attitudes toward seeking psychological help ($b = -5.34$, $t(117) = -2.64$, $p < .01$), and more positive attitudes were subsequently related to higher intentions to seek counseling ($b = .950$, $t(117) = 4.78$, $p < .001$). These results support the mediational hypothesis. Psychological distress was not longer a predictor of intentions to seek counseling after controlling for the mediator, attitudes toward seeking professional help ($b = 3.56$, $t(117) = .816$, $p > .05$), which is consistent with full mediation. Approximately 20% of the variance in intentions to

seeking counseling was accounted for by the predictors $R^2 = .200$, $F(1, 117) = 11.84$, $p < .001$. The results of a bootstrap estimation indicated the indirect coefficient was significant, $b = -5.07$, 95% CI = -9.12 to -1.042. Higher psychological distress was associated with approximately 5.07 points lower on the intentions to seek counseling measure as mediated by attitudes toward seeking professional help.

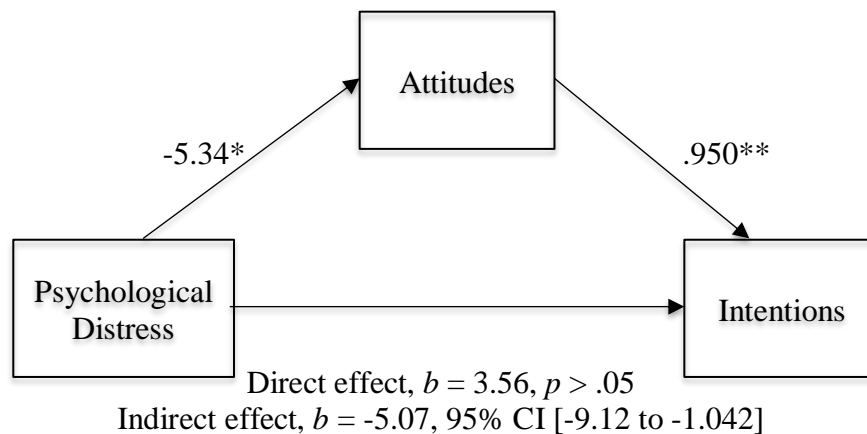


Figure 5. Model 2 with unstandardized beta weights.

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

Model 3. Regression analysis was used to investigate the hypothesis that attitudes toward seeking professional help mediate the effect of anticipated barriers and intentions to seek counseling. Results (see Figure 6) indicated that participants reporting more barriers had less positive attitudes toward seeking professional psychological help ($b = -.066$, $t(117) = -2.66$, $p < .01$) and more positive attitudes were subsequently related to higher intentions to seek counseling ($b = 1.04$, $t(117) = 5.70$, $p < .001$). Barriers were no longer a predictor of intentions to seek counseling after controlling for the mediator, attitudes, ($b = .040$, $t(117) = .721$, $p > .05$), which is consistent with full mediation. Approximately 22% of the variance in intentions to seek counseling was accounted for by

the predictors $R^2 = .222$, $F(1, 117) = 16.56$, $p < .001$. The results of a bootstrap estimation indicated the indirect coefficient was significant, $b = -.069$, 95% CI = -6.68 to -.201. More perceived barriers were associated with scores that were approximately .069 points lower on the intentions to seek counseling measure as mediated by attitudes toward seeking professional help.

The percentage of all participants reporting the degree to which each barrier would “stop, delay, or discourage” them from seeking professional help is presented in Table 4. The most frequently endorsed items were: item 2 (*Wanting to solve the problem on my own*), item 10 (*Preferring to get alternative forms of care [e.g. traditional / religious healing or alternative / complementary therapies]*), item 11 (*Not being able to afford the financial costs involved*), and item 21 (*Not wanting a mental health problem to be on my medical records*). Items 2 (*Wanting to solve the problem on my own*), 7 (*Thinking the problem would get better by itself*), 10 (*Preferring to get alternative forms of care [e.g. traditional / religious healing or alternative / complementary therapies]*), 15 (*Professionals from my own ethnic or cultural group not being available*), and 23 (*Preferring to get help from family or friends*) were endorsed by approximately half the participants.

Results from an independent samples *t*-test showed that males scored significantly higher on the overall BACE scale (mean= 22.90, SD =23.58, *n* = 30) than females (mean = 21.04, SD = 17.44, *n* = 83), where *t* (111) = .455, *P* < .05. There was not a significant difference in perceived barriers when comparing location of residence.

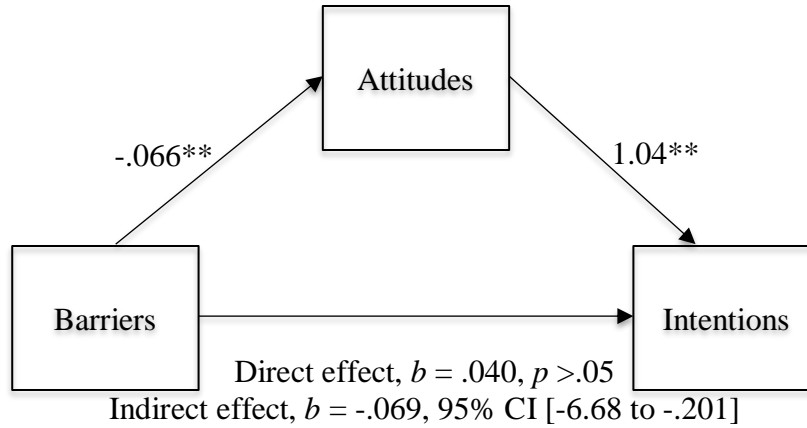


Figure 6. Model 3 with unstandardized beta weights.

p* < .05, *p* < .01

Table 4

Percentage, Frequencies, and Mean Scores of BACE Items

Barrier item	Item as a barrier to any degree % (<i>n</i>)	Item as a major barrier % (<i>n</i>)	Mean	SD
1. Being unsure where to go to get professional care	32.8 (39)	3.4 (4)	.49	.758
2. Wanting to solve the problem on my own	50.4 (60)	21.8 (26)	1.39	1.113
3. Concern that I might be seen as weak for having a mental health problem	24.4 (29)	5.9 (7)	.54	.919
4. Fear of being put in hospital against my will	16.8 (20)	5.0 (6)	.40	.839
5. Concern that it might harm my chances when applying for jobs	22.7 (27)	5.0 (6)	.92	1.397
6. Problems with transport or travelling to appointments	19.4 (23)	4.3 (5)	.39	.793
7. Thinking the problem would get better by itself	44.5 (53)	9.2 (11)	.82	.949
8. Concern about what my family might think, say, do or feel	34.4 (41)	6.7 (8)	.64	.911
9. Feeling embarrassed or ashamed	33.6 (40)	4.2 (5)	.60	.876
10. Preferring to get alternative forms of care (e.g. traditional / religious healing or alternative / complementary therapies)	50.4 (60)	12.6 (15)	1.07	1.027
11. Not being able to afford the financial costs involved	37.8 (45)	16.0 (19)	.99	1.113
12. Concern that I might be seen as 'crazy'	19.3 (23)	7.6 (9)	.48	.910
13. Thinking that professional care probably would not	22.7 (27)	5.0 (6)	.45	.833

help				
14. Concern that I might be seen as a bad parent	13.5 (16)	1.7 (2)	1.24	1.718
15. Professionals from my own ethnic or cultural group not being available	42.0 (50)	7.6 (9)	.81	.963
16. Being too unwell to ask for help	14.4 (17)	4.2 (5)	.29	.705
17. Concern that people I know might find out	24.3 (29)	6.7 (8)	.51	.891
18. Dislike of talking about my feelings, emotions or thoughts	33.7 (40)	8.4 (10)	.67	.943
19. Concern that people might not take me seriously if they found out I was having professional care	26.0 (31)	7.6 (9)	.53	.891
20. Concerns about the treatments available (e.g. medication side effects)	33.4 (41)	10.1 (12)	.79	1.024
21. Not wanting a mental health problem to be on my medical records	25.2 (30)	11.8 (14)	.75	1.091
22. Having had previous bad experiences with professional care for mental health	23.5 (28)	6.7 (8)	.50	.877
23. Preferring to get help from family or friends	38.6 (46)	7.6 (9)	.72	.938
24. Concern that my children may be taken into care or that I may lose access or custody without my agreement	4.2 (5)	5.9 (7)	1.35	1.813
25. Thinking I did not have a problem	30.3 (28)	4.2 (5)	.53	.842
26. Concern about what my friends might think, say or do	23.5 (28)	4.2 (5)	.42	.789
27. Difficulty taking time off work	30.2 (36)	8.4 (10)	.92	1.259
28. Concern about what people at work might think, say or do	35.3 (42)	4.2 (5)	.74	1.085
29. Having problems with childcare while I receive professional care	13.5 (16)	3.4 (4)	1.22	1.695
30. Having no one who could help me get professional care	15.9 (19)	5.0 (6)	.37	.805

N = 119

Model 4. Regression analysis was used to investigate the hypothesis that attitudes toward seeking professional help mediate the effect of acculturation, specifically scores on the Core Self subscale, and intentions to seek counseling. Results (see Figure 7) indicated that participants reporting higher Core Self acculturation had more positive attitudes toward seeking professional psychological help, although this association was not significant ($b = .125$, $t(117) = 1.85$, $p > .05$), but more positive attitudes were significantly related to higher intentions to seek counseling ($b = .960$, $t(117) = 5.25$, $p < .001$). Core Self was not a predictor of intentions to seek counseling after controlling for the mediator, attitudes ($b = .049$, $t(117) = .336$, $p > .05$). Approximately 20% of the variance in intentions to seek counseling was accounted for by the predictors, $R^2 = .193$, $F(1,117) = 13.87$, $p < .001$. The results of bootstrap estimation indicated the indirect

coefficient was significant, $b = .120$, 95% CI = .013 to .251. Higher Core Self acculturation scores were associated with a .120-point increase in intentions as mediated by attitudes toward seeking professional help.

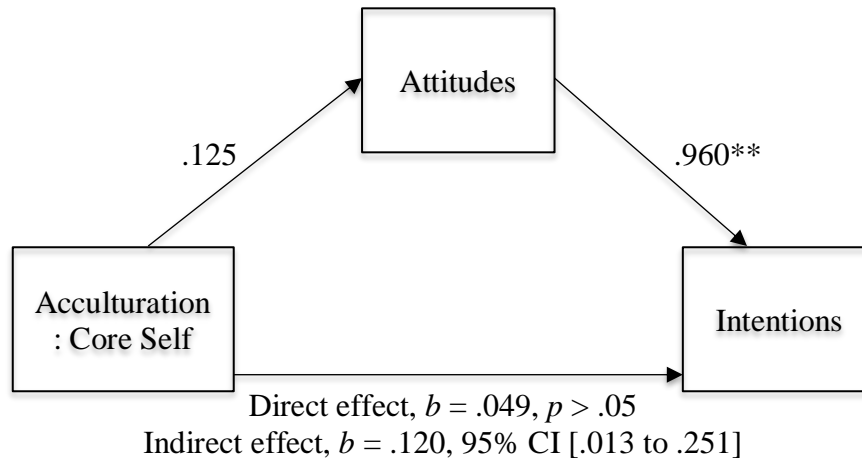


Figure 7. Model 4 with unstandardized beta weights.

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

Model 5. Regression analysis was used to investigate the hypothesis that attitudes toward seeking professional help mediate the effect of acculturation, specifically scores on the Cultural Self Expression subscale, and intentions to seek counseling. Results (see Figure 8) indicated participants reporting higher Cultural Self Expression had more positive attitudes toward seeking professional psychological help, although this association was not significant ($b = .197$, $t(117) = 1.28$, $p > .05$), but more positive attitudes were subsequently related to higher intentions to seek counseling ($b = .975$, $t(117) = 5.42$, $p < .001$). Cultural Self Expression was not a predictor of intentions to seek counseling after controlling for the mediator, attitudes, ($b = -.255$, $t(117) = -.762$, $p > .05$).

Approximately 21% of the variance in intentions to seek counseling was accounted for by the predictors, $R^2 = .201$, $F(1,117) = 15.06$, $p < .001$. The results of

bootstrap estimation indicated the indirect coefficient was not significant $b = .192$, 95% CI = $-.097$ to $.5169$.

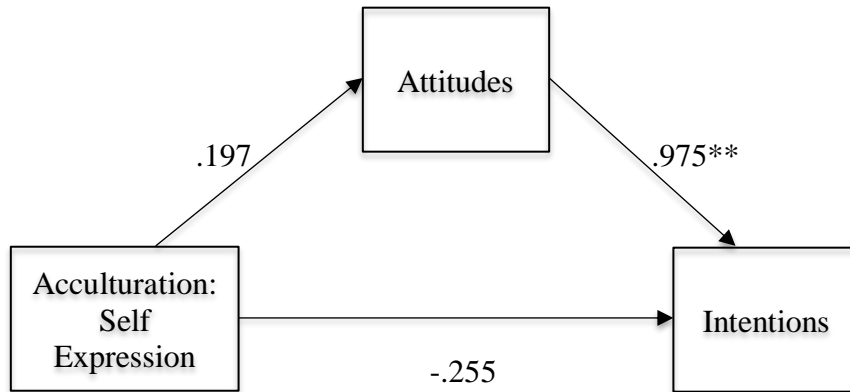


Figure 8. Model 5 with unstandardized beta weights.

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

Model 6. Regression analysis was used to investigate the hypothesis that attitudes toward seeking professional help mediate the effect of acculturation, specifically scores on the Cultural Community Engagement subscale, and intentions to seek counseling. Results (see Figure 9) indicated participants reporting less engagement with their Native community (higher acculturated engagement) had more positive attitudes toward seeking professional psychological help, although this association was non-significant ($b = .015$, $t(117) = .109$, $p > .05$), but more positive attitudes were related to higher intentions to seek counseling ($b = .947$, $t(117) = 5.32$, $p < .001$). Cultural Community Engagement was not a predictor of intentions to seek counseling after controlling for the mediator, attitudes ($b = -.442$, $t(117) = -1.56$, $p > .05$), which is consistent with full mediation. Approximately 21% of the variance in intentions to seek counseling was accounted for by the predictors, $R^2 = .212$, $F(1,117) = 15.66$, $p < .001$. The results of bootstrap estimation indicated the indirect coefficient was not significant $b = .014$, 95% CI = $-.293$ to $.245$.

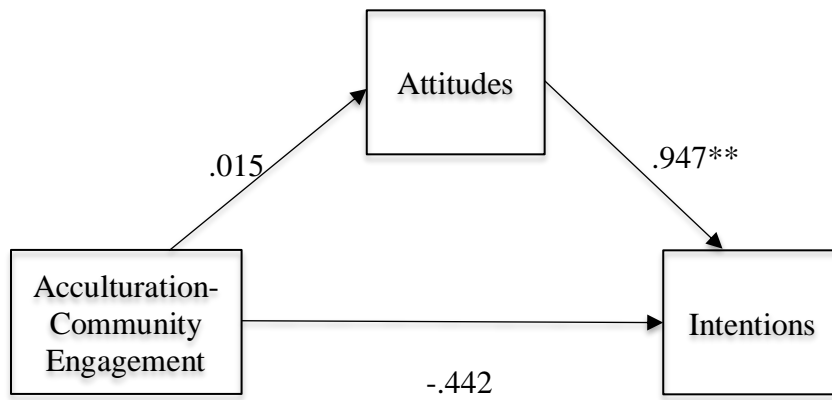


Figure 9. Model 6 with unstandardized beta weights.
* $p < .05$, ** $p < .01$

CHAPTER 5:

DISCUSSION OF FINDINGS AND CONCLUSIONS

The purpose of the present investigation was to determine if Cramer's (1999) model of help-seeking was supported in a Diné sample and if the integration of residence and cultural variables predicted help-seeking intentions. There is little to no information about Diné attitudes toward and willingness to seek counseling. Existing literature is generalized to all Native Americans and does not clearly indicate that Diné tribal members were in the sample. The results of this study will help create a better understanding of Diné perceptions of counseling.

This chapter is organized into four subsections. The first reports the major findings of this study. Interpretations and explanations of the findings, as guided by the theoretical model and previous research, are presented. The second section explores the theoretical, research, and practical applications of the findings. Section three discusses the limitations of this study with consideration for the constraints posed by the nature of the participants and in the manner in which the research was conducted. The fourth section presents recommendations for future research. This chapter concludes with a summary of the work, its place within the research literature, and the relevance of ongoing investigation into this particular area of research.

Results and Discussion of Research Questions

The three research questions for this study were: (a) do psychological and cultural variables predict help-seeking attitudes in a Diné sample; (b) do attitudes predict willingness to seek counseling in a Diné sample; and (c) do one's attitudes toward seeking psychological help explain the relationship between psychological and cultural variables and willingness to seek counseling in a Diné sample?

Psychological distress, culture, barriers, and attitudes

The first research question: Do psychological (perceived barriers to care and psychological distress) and cultural variables (acculturation, place of residence) predict help-seeking attitudes in a Diné sample? The hypothesis that psychological and cultural variables would predict help-seeking was partially supported in this study. Two of the three NAAS acculturation subscales (Core Self and Community Engagement) were significant positive predictors of intentions to seek counseling.

As expected, tribal members living in reservation communities scored significantly lower on the acculturation measure than tribal members living in non-reservation communities. The higher reports of acculturation levels for participants in non-reservation settings signify cultural connection with mainstream American society with more assimilation. There were two positive acculturation predictors of intentions to seek counseling (Core Self and Cultural Community Engagement) and one acculturation factor that was not a significant predictor (Cultural and Community Engagement). The Core Self subscale of the NAAS measured centrality to one's Native culture. For the current sample, Diné participants who had high scores on the Core Self subscale (which indicates they do not identify their Native culture as central to who they are and have

high acculturation) reported more positive attitudes toward counseling and subsequent intentions to seek counseling. In contrast, Diné participants who had low scores on the Core Self subscale (less acculturation and stronger connection with their Native self) had more negative attitudes toward counseling, which in turn, predicted intentions to seek counseling. The Cultural Self Expression subscale on the NAAS measured how one uses English or tribal language to express themselves or reflect on their experiences. Diné participants who scored higher on the Cultural Self Expression subscale (more likely to think, speak, write, and feel using English) had more positive attitudes toward counseling with more intention to seek counseling. Those who had low scores on the Cultural Self Expression subscale (more likely to think, speak, write, and feel using their Native language) had less positive attitudes, which predicted intentions to seek counseling. The Cultural and Community Engagement subscale reflects engagement and pride in a person's Native culture. Cultural and Community Engagement scores, where high scores indicate alignment with White culture and less likely to take pride in Native culture and low scored indicate more involvement with their Native culture with pride in their Native identification, were not significant predictors of attitudes or intentions to seek counseling.

In considering acculturation and that the factors that measured connection with Native self and expressing experiences, it is interesting to consider why Diné participants who had lower acculturation scores would have less positive attitudes and less intentions to seek counseling. With a Diné sample, it is important to consider the unique cultural variables. Diné culture has similar characteristics to other indigenous groups, including connection to nature, a collectivistic outlook, and a traditional spirituality (Kahn-John, & Koithan, 2015). In considering the unique traditional aspects of the Diné tribe, Hózhó is

an important consideration. Hózhó is the sacred Diné philosophy or belief system (Kahn-John, & Koithan, 2015) and those who live in accordance with Hózhó demonstrate such traits as humility, patience, discipline, physical health and strength, *Ké* (Diné connectedness to family, clan, tribe, and community), and connectedness to the environment (nature, living creatures, spirits, family and community). This philosophy is the basis of the traditional wellness ideal of the Diné. Future studies should explore whether Diné participants with lower acculturation scores are living Hózhó and may have less distress due to factors related to this belief system.

When examining quartile differences in acculturation (lower quartile aligns with Traditional, middle two quartiles align with Bicultural, and upper quartile aligns with Acculturated/Assimilated Native identities), there were not significant differences in reports of psychological distress. The total amount of variance in intentions to seek counseling that was accounted for by psychological distress and attitudes was 20%. Psychological distress did contribute significant variance to help-seeking attitudes. Participants who experienced psychological distress were less likely to seek out mental health services.

Unlike previous findings (Kessler, et al., 2004; Morgan et al., 2003; Tisby et al., 2001), men in this study reported more psychological distress than women. There is not any reliable evidence to compare these findings, but it is notable that the 2015 Center for Disease Control (CDC) report showed higher rates of suicide among Native men than women and the population report for psychological distress was higher than the White population (CDC, 2015).

These acculturation findings support the generalizability of the variables described in Vogel et al.'s (2005) help-seeking model to a Diné population. When considering barriers, it is interesting that 62% of the participants in this sample noted that a barrier to seeking professional psychological care was their preference for alternative forms of healing, which included traditional healing methods. Approximately 49% of participants indicated not having professionals from their own ethnic group available was a barrier to care. When examining these results based on residence, there were no significant differences. This suggests that regardless of where participants lived, over half desired alternative forms of healing over standard counseling services and nearly half preferred providers from their own ethnic group. This is an interesting opportunity for further research and highlights the continued need for more Native clinicians. The most recent APA Center for Workforce Study (2018) did not report the number of Native American psychologists in the workforce, but reported that less than 1 percent were multiracial or from other racial/ethnic groups. Native Americans were grouped into the 'other racial/ethnic groups.' In 2003, it was found that there were less than 200 doctoral-level Native American psychologists in the United States (Benson, 2003). In 2009, that number had increased to about 350 (Trimble & Clearing-Sky, 2009).

The variance in intentions to seek counseling that was accounted for by the total acculturation scale score was 20.3%. The direct and significant predictive relationship between acculturation and attitudes toward seeking professional psychological help is in keeping with Atkinson and Gim's (1989) results with an Asian-American population. They found that Asian-American students with higher levels of acculturation were more willing to seek professional psychological services. These findings were supported in

research conducted by Tata and Leong, (1994). Tata and Leong (1994) note that stronger identity with one's ethnic culture and values may lead to a conflict of values that impacts willingness to seek counseling.

Help seeking attitudes

The second research question was: do attitudes predict willingness to seek counseling in a Diné sample? Previous research has been limited in its examination of Native American help seeking behaviors and intentions. Articles that have focused on Native American help seeking have not focused on unique tribal experiences and have only focused on older adults (Roh, Burnette, Lee, Lee, Martin, & Lawler, 2014), high school students (Bee-Gates, Howard-Pitney, LaFromboise, & Rowe, 1996), or Natives with substance use issues (Beals et al., 2006; Venner, Greenfield, Vicuña, Bhatt, & O'Keefe, 2012). To date, there has not been a focused examination of help seeking attitudes and intentions in a Diné sample.

The findings from this investigation supported the assumption that attitudes explain the relationship between psychological and cultural variables and one's intentions to seek counseling. These findings align with observations in previous research that attitudes toward counseling are either negatively or positively associated with willingness to seek counseling (Cepeda-Benito & Short, 1998; Cramer, 1999; Deane & Todd, 1996; and Leaf & Bruce, 1987). Participants in this study held more positive attitudes toward seeking help than indicated in the mean ATSPPH-SF score of the normative sample ($M = 17.45$, $SD = 5.97$). For the reservation population, the mean was 18.77 with a standard deviation of 4.42; for the non-reservation population, the mean was 21.69, with a

standard deviation of 5.45. The difference in attitude scores between the two was significant with $p < .01$.

Tests of mediation

The third research question was: does one's attitudes toward seeking psychological help explain the relationship between psychological and cultural variables and willingness to seek counseling in a Diné sample?

The relationship between independent variables and intention to seek counseling was mediated by attitudes. For this Diné sample, attitudes were related to willingness to seek counseling. Location of residence and its relationship to intentions to seek counseling was mediated by attitudes. The results of this mediation indicated that Diné tribal members living in a non-reservation community reported more positive attitudes toward seeking psychological help and this relation could be explained by attitudes toward counseling. In considering where one lives as a predictor of attitudes and willingness to seek counseling in this Diné sample, there are other factors that could contribute to those who are not willing to seek help for psychological distress, including barriers to care. A closer examination showed that for participants in reservation communities, preferring to get help from family or friends (71.8%) were identified as barriers to care. This may be explained by cultural values and signify alignment with one's family over the individualistic and independent nature of counseling. Overall, those living in reservation communities, men, and those with higher psychological distress reported more barriers to care.

Higher scores on the barriers to care scale negatively predicted attitudes (meaning less positive attitudes). Barriers had an indirect effect on willingness to seek counseling.

Theoretical Considerations

Cultural factors lend a new lens to understanding tribal member willingness to seek counseling. Previous studies have explored the direct effects of acculturation on attitudes (Tata & Leong, 1994; Ying & Miller, 1992) and willingness (Atkinson et al., 1995), but have not incorporated a mediation model. The present study found that acculturation is associated with attitudes, but is not directly related to willingness to seek counseling. As hypothesized, strong alignment with Diné culture had an inverse indirect association with willingness to seek counseling via attitudes toward counseling. This replicates findings from previous research (Cantazaro, 2009; Miville & Constantine, 2006; Liao et al., 2005) that found higher levels of acculturation were related to more positive attitudes toward seeking counseling.

Implications for Research and Practice

The current research provides a framework for understanding help seeking behaviors in Diné tribal members. The results build on previous findings that intentions are based on ones' attitude toward a behavior and expectations about the behavior (Vogel & Wester, 2003; Ajzen & Fishbein, 1980). Consistently, attitudes were a strong predictor of help-seeking willingness in this study. Further, the present study adds to the help-seeking literature with empirical evidence that the relations between location of residence, psychological distress, barriers, and two factors of acculturation on psychological help-seeking are mediated by attitudes toward counseling.

These findings reveal important links between psychological, cultural, and attitudinal variables and help seeking that have implications for research and practice.

The Diné represent the second largest Native American tribe in the United States, with approximately 330,000 enrolled tribal members across Utah, Colorado, Arizona, and New Mexico. As is the case with most Native American communities, Diné communities are experiencing significant events that impact the psychological well-being of tribal members. In 2015, a state of emergency was declared on the Diné Nation due to a higher number of suicides in small tribal communities (News Article, 2015). The Vice President of the tribal nation has launched a number of health initiatives due to the shorter-than-average life expectancy of Diné tribal members. These initiatives include raising awareness of suicide risk, alcohol-related deaths, and increasing mental health issues. In order for counselors and psychologists to develop more informed mental health programming, psychological support, and intervention services for tribal members, a well-defined understanding of the antecedents to help seeking is critical.

Among the most obvious conclusions indicated by these findings is the importance of cultural understanding. Not only is the significance of one's residence underscored, but the importance of psychological distress and barriers is important. When demographic variables were examined it was striking that those reporting lower income and less education reported more psychological distress and more perceived barriers. Furthermore, those who experienced more psychological distress and barriers also had more negative attitudes toward professional psychological help, suggesting that those who need help the most appear reluctant to seek it from a professional. This raises the question of what practitioners can do to provide services to tribal members in high need of but who are unlikely to actively seek services. Reevaluating and changing psychological service delivery systems may be one option. For example, some tribes are

implementing home visits, which include behavioral health services, but services are often delivered by paraprofessionals or paired with physical health checks (Barlow et al., 2013). Further exploration of this option and potential treatment outcomes are needed.

Future studies should also examine the roles of historical trauma, colonization, and other sociopolitical factors. For the Diné, these are all relevant to psychological distress and utilization of health services. An exploration of the continued effect of these factors is recommended. Future studies may examine white institutional distrust, which has been explored with Native cancer patients (Guadagnolo et al., 2009), Native American elders (Simonds, Goins, Krantz, & Garrouette, 2013), and Native American college students (Reeves, 2017). Consideration of the living conditions and daily burdens (e.g. hauling water, contaminated water, transportation restrictions) of those living on a reservation may yield important information about help-seeking among the Diné. The median income on the Navajo Nation is approximately \$27,00 per year, which is half the median income of Arizona, where most Diné live (McKenzie, Jackson, Yazzie, Smith, & Crotty, 2013).

This study only examined attitudes toward and intentions to seek professional help. As with any member of any cultural background, the Diné hold traditional beliefs and these may hold bearing on their attitudes and intentions. A significant area for further exploration is to learn more about beliefs commonly held by Diné concerning mental health. Traditional beliefs reflect personal experiences, but often reflect older traditions and can provide significant insight into Diné cultural priorities as they relate to seeking help.

The findings in this study can inform diversity training for new practitioners and continuing education of practicing counselors and psychologists. Understanding what inhibits and facilitates a Diné client's help-seeking can lead to changes in outreach programming, provision of existing services, or the development of interventions that increase utilization among the most at-risk members of the Diné tribe.

This model may be helpful for other American tribes. Due to the heterogeneity of American tribes, within-group understanding can drive programming and expand service utilization. The constructs measured in this study should be broad enough and applicable to other Native American tribes. For tribes that have limited access or exposure to professional psychological resources, this examination of help-seeking may not be applicable. The primary goal of understanding help-seeking attitudes and intentions in Native American tribes is to move away from issues of generalizability and instead work from a stance of specificity.

There are a number of small tribes in the United States, particularly Alaska Native and Pueblo villages. This approach to understanding psychological service utilization may not be generalizable to the smaller or more isolated tribes.

Areas for Future Research

As discussed, the sample for this study was a convenience sample of Diné tribal members. A more diverse age range and broader sampling from reservation communities would be beneficial to future research, as well as isolating some of the demographic variables to assess their impact on help-seeking attitudes and intentions. This will provide insight into some of the observed effects of low SES, less education, and unwillingness to seek counseling.

Future research should focus on intervention and outreach efforts to determine its utility in increasing help-seeking behavior. The development of outreach programming could base its efforts on the factors that were shown to have a strong association with Diné attitudes and intentions such as highlighting culturally sensitive interventions in communities or increasing the representation of Diné practitioners in existing treatment facilities. Further research is needed to understand the experiences of Diné men. This study only had 30 men, so there is room for focus on Diné men. Specifically, men in this study reported more perceived barriers to seeking psychological care and higher levels of psychological distress. This is an interesting vein for further examination.

Participatory action research (PAR) would be a recommended methodology for future explorations. This community-based approach would support a collaborative, informed inquiry into the needs of the Diné tribe. In terms of reducing health inequities, PAR would facilitate the tribe taking actions on findings to improve the well-being of tribal members from within. In terms of help-seeking decisions, the voices of Diné tribal communities would serve to education researchers and community members.

Research Limitations

The results of this study need to be considered in light of several limitations. First, the present sample of Diné tribal members restricts the generalizability of the findings. This sample was uniquely composed of 69% women and 29.3% of the participants had obtained a master's or doctoral degree, with 20% of the population having completed bachelor's degrees. These statistics are not consistent with the overall education rates for the Diné tribe. According to the 2002 census, 55.93% of the population over the age of 25 has a high school degree and only 7.29% have further

education, with bachelor's and advanced degrees being combined. Although the results provide insight into this subgroup of Diné tribal members, replication with other samples with lower levels of education is recommended. Second, over half (57%) of participants were born on a reservation, which was not properly explored in this sample. Many Native Americans have extensive connections to tribal or reservation communities but have dynamic cultural experiences and identities. Third, the sampling procedures (snowball) used in this study may have led to selection bias. The number of participants with graduate degrees in the sample may reflect that the population who responded to the survey was more inclined to help with the academic responsibility of completing a dissertation. Fourth, while the models in this study were largely supported, they did not include other cultural (e.g., spirituality, historical trauma) or independent variables (e.g., family history of mental illness) that may be associated with help seeking. Testing other hypotheses is indicated. Fifth, while this study built on Vogel & Wester's (2003) work and supported Ajzen and Fishbein's (1980) theory of reasoned action to understand help-seeking decisions as directly based on attitudes toward the behavior, actual behavior was not assessed in this study. Sixth, this study only considered help-seeking decisions with the Diné tribe which may only capture phenomenon specific to this sample. Seventh, the sample size was small and did not capture the diversity of the Diné tribe. Future studies should rely more heavily on community involved research or recruitment from Native organizations or centers rather than online survey. The study was also cross sectional so causality cannot be inferred. Finally, replication of this model with consideration of the aforementioned limitations will ensure its applicability in practice.

Conclusion

In conclusion, Cramer's help seeking model was useful in predicting help-seeking attitudes toward mental health services among Diné tribal members. Because of this, expanding on this research will provide more in-depth understanding of how Diné tribal members perceive mental health and culturally specific services for mental health issues. While the sample for this study was unique in the high education attainment, it is not representative of the broader Diné tribe. It is promising that there are so many tribal members seeking higher education, but there is still considerable need for Diné counselors and psychologists. More Diné researchers and more Diné practitioners is the best solution to system issues in the existing mental health system. From a social justice perspective, it is important to reverse poverty, facilitate community development and remove systemic barriers to wellness to address some of the observed concerns within this study population. Facilitating the return of Diné professionals to their communities can increase the intellectual capital and quality of life for all members. Readers are encouraged to reference an interesting exploration of how one group created a model of collaboration between academics and tribal policy researchers in an effort to facilitate the return of Diné tribal members to their communities after academic achievements (McKenzie, Jackson, Yazzie, Smith, & Crotty, 2013). Pursuing research questions from more postmodern philosophical lenses and from a collaborative stance can contribute to the decolonization of psychological research. There are many opportunities to consider the psychological needs of the Diné and future researchers are encouraged to maximize the voices in these communities.

REFERENCES

- A Quiet Crisis: Federal Funding and Unmet Needs in Indian Country*. Washington, DC: US Commission on Civil Rights; 2003.
- Adekoya, N., Truman, B., & Landen, M. (2015). Incidence of notifiable diseases among American Indians/Alaska Natives –United States, 2007-2011. *Morbidity and Mortality Weekly Report*,
- Alegria, M., Canino, G., Rios, R., Vera, M., Calderon, J., Rusch, D., & Ortega, A.N. (2002). Mental health care for Latinos: Inequalities in use of specialty mental health services among Latinos, African Americans, and non-Latino Whites. *Psychiatric Services*, 53(12), 1547-1555.
- Alvidrez, J. (1999). Ethnic variation in mental health attitudes and help-seeking behaviours among low income African American, Latina, and European American young women. *Community Mental Health Journal*, 35, 515-530.
- Alvidrez, J. (1999). Ethnic variations in mental health attitudes and service use among low-income African American, Latina, and European American young women. *Community Mental Health Journal*, 35, 515-530.
- American Psychological Association, *About Counseling Psychology*,
- American Psychological Association. (2010). *Mental Health Disparities: American Indians and Alaska Natives* [Fact Sheet]. Retrieved from www.integration.samhsa.gov/workforce/mental_health_disparities_american_indian_and_alaskan_natives.pdf

- Anderson, J.C., & Gerbing, D.W. (1998). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411-423.
- Ang, R.P., Lau, S., Tan, A.-G., & Lim, K.M. (2007). Refining the attitudes toward seeking professional psychological help scale: factorial invariance across two Asian samples. *Measurement & Evaluation in Counseling and Development*, 40, 130-141.
- Armitage, C.J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. *British Journal of Social Psychology*, 40, 471-499.
- Atkinson, D.R., & Gim, R.H. (1989). Asian-American cultural identity and attitudes toward mental health services. *Journal of Counseling Psychology*, 36(2), 209-212.
- Beals, J., Novins, D.K., Spicer, P., Whitesell, N.R., Mitchell, C.M. Manson, S.M. & AI-SUPERPFP. (2006). Help seeking for substance use problems in two American Indian reservation populations. *Psychiatric Services*, 57(4), 512-520.
- Bee-Gates, D., Howard-Pitney, B., LaFromboise, T.D., & Rowe, W. (1996). Help-seeking behavior of Native American Indian high school students. *Professional Psychology: Research and Practice*, 27(5), 495-499.
- Beitel, M., Allahjah, A.A., Cutter, C.J., Blackhawk, N., & Van Alst, T. (2013). Expectations and preferences for counseling and psychotherapy in Native Americans. *Journal of Indigenous Research*, 2(1), 1-6.
- Birkel, R.C., & Reppucci, N.D. (1983). Social networks, information-seeking, and the utilization of services. *American Journal of Community Psychology*, 11(2), 185-205.

- Carten, A. J. (2006). African Americans and mental health. *Community Mental Health: Challenges for the 21st Century*, 125-139.
- Cash, T.F., Begley, P.J., McCown, D.A., & Weise, B.C. (1975). When counselors are heard but not seen: Initial impact of physical attractiveness. *Journal of Counseling Psychology*, 22, 273-279.
- Chen, S.X., & Mak, W.W. (2008). Seeking professional help: etiology beliefs about mental illness across cultures. *Journal of Counseling Psychology*, 55(4), 442-450.
- Clement, S., Brohan, E., Jeffery, D., Henderson, C., Hatch, S., & Thornicroft, G. (2012). Development and psychometric properties of the Barriers to Access to Care Evaluation scale (BACE) related to people with mental ill health. *BMC Psychiatry*, 20, 12-36.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (revised edition)*. N.Y.: Academic Press.
- Constantine, M.G., Wilton, L., & Caldwell, L.D. (2003). The role of social support in moderating the relationship between psychological distress and willingness to seek psychological help among Black and Latino college students. *Journal of College Counseling*, 6, 155-165.
- Corrigan, P.W. (2004). How stigma interferes with mental healthcare? *American Psychologist*, 59(7), 614-625.
- Cramer, K.M. (1999). Psychological antecedents to help-seeking behavior: A reanalysis using path modeling structures. *Journal of Counseling Psychology*, 46, 381-387.

- Deane, F.P., & Chamberlain, K. (1994). Treatment fearfulness and distress as predictors of professional psychological help-seeking. *British Journal of Guidance & Counselling*, 22(2), 207-217.
- Deane, F.P., & Todd, D.M. (1996). Attitudes and intentions to seek professional psychological help for personal problems or suicidal thinking. *Journal of College Student Psychotherapy*, 10, 45-59.
- Delgado-Romero, E.A., Galvan, N., Maschino, P., & Rowland, M. (2005). Race and ethnicity in empirical counseling and counseling psychology research: A 10-year review. *The Counseling Psychologist*, 33(4), 419-448.
- Derogatis, L.R. (2001). BSI 18, Brief Symptom Inventory 18: Administration, scoring and procedures manual. NCS Pearson, Incorporated.
- Derogatis, L.R., & Melisaratos, N. (1983). The brief symptom inventory: an introductory report. *Psychological Medicine*, 13, 595-605.
- Ecklund, T.R. (2005). *The relationship between psychosocial development and acculturation among American Indian college students* (Doctoral dissertation). Available from ProQuest Dissertations and theses database (AAT 3174142).
- Elhai, J.D., Schweinle, W., & Anderson, S.M. (2008). Reliability and validity of the Attitudes Toward Seeking Professional Psychological Help Scale-Short Form. *Psychiatry Research*, 159, 320-329.
- Fischer, E.H., & Cohen, S.L. (1972). Demographic correlates of attitude toward seeking professional psychological help. *Journal of Counseling and Clinical Psychology*, 39(1), 70-74.

- Fischer, E.H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development, 36*(4), 368-373.
- Fischer, E.H., & Turner, J.I. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology, 35*(1), 79-90.
- Frazier, P.A., Tix, A.P., & Barron, K.E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology, 51*, 115-134.
- Freitas-Murrell, B., & Swift, J.K. (2015). Predicting attitudes toward seeking professional psychological help among Alaska Natives. *American Indian and Alaska Native Mental Health Research (online)*, 21-35.
- Friedman, M.J., & West, A.N. (1987). Current need versus treatment history as predictors of use of outpatient psychiatric care. *American Journal of Psychiatry, 144*, 355-357.
- Fritz, M.S. & MacKinnon, D.P. (2007). Required sample size to detect the mediated effect. *Psychological Science, 18*(3), 233-239.
- Garrett, M.T., & Pichette, E.F. (2000). Red as an apple: Native American acculturation and counseling with or without reservation. *Journal of Counseling and Development, 78*(1), 3-13.
- Gone, J.P. (2010). Psychotherapy and traditional healing for American Indians: Exploring the prospects for therapeutic integration. *The Counseling Psychologist, 38*(2), 166-235.

- Gone, J.P., & Alcantara, C. (2005). Practice makes perfect? Identifying effective psychological treatments for mental health problems in Indian country. In E.H. Hawkins & R.D. Walker (Eds.), *Best practices in behavioral health services for American Indians and Alaska Natives* (pp. 113-142). Portland, OR: One Sky National Resource Center for American Indian and Alaska Native Substance Abuse Prevention and Treatment Services.
- Gone, J.P., & Alcantara, C. (2007). Identifying effective mental health interventions for American Indians and Alaska Natives: A review of the literature. *Cultural Diversity and Ethnic Minority Psychology, 13*, 356-363.
- Gonzalez, J.M., Alegria, M. & Prihoda, T.J. (2005). How do attitudes toward mental health treatment vary by age, gender, and ethnicity/race in young adults? *Journal of Community Psychology, 33*(5), 611-629.
- Gray, J.S., & Rose, W.J. (2011). Cultural adaptation for therapy with American Indians and Alaska Natives. *Journal of Multicultural Counseling and Development, 40*, 82-92.
- Green, E. (2014). *Urbanization and identity change among Native Americans*. Paper presented at the Annual Meeting of the American Political Science Association, Washington D.C.
- Guadagnolo, B., Cina, K., Helbig, P., Molloy, K., Reiner, M., Cook, E., & Petereit, D. (2009). Medical mistrust and less satisfaction with health care among Native Americans presenting for cancer treatment. *Journal of Health Care for the Poor and Underserved, 20*(1), 210-226.

- Halgin, R.P., Weaver, D.D., Edell, W.S., & Spencer, P.G. (1987). Relation of depression and help-seeking history to attitudes toward seeking professional psychological help. *Journal of Counseling Psychology*, 34, 177-185.
- Heckathorn, D.D. (1997). Respondent-driven sampling: a new approach to the study of hidden populations. *Social Problems*, 44, 174-199.
- Herman-Stahl, M., Spencer, D.L., & Duncan, J.E. (2003). The implications of cultural orientation for substance use among American Indians. *American Indian and Alaska Native Mental Health Research*, 11, 46-66.
- Herring, R.D. (1999). *Counseling with Native American Indians and Alaska Natives*. Thousand Oaks, CA: Sage Publications.
- Hinson, J.A., & Swanson, J.L. (1993). Willingness to seek help as a function of self-disclosure and problem severity. *Journal of Counseling & Development*, 71(4), 465-470.
- Hirschfelder, A., & Kriepe de Mnotano, M. (1993). *The Native American almanac: A portrait of Native America today*. New York: Macmillan.
- Hodgkinson, H.L. (1990). *The demographics of American Indians: One percent of the people; fifty percent of diversity*. Washington, D.C.: Institute for Educational Leadership.
- Hoyt, D.R., Conger, R.D., Valde, J.G., & Weihs, K. (1991). Psychological distress and help-seeking in rural America. *American Journal of Community Psychology*, 25(4), 449-470.
- <http://www.div17.org/about-cp/what-is-counseling-psychology/>.

- Hulburt, G., Kroeker, R., & Gade, E. (1991). Study orientation, persistence and retention of Native students: Implications for confluent education. *Journal of American Indian Education*, 30(3), 16-23.
- Indian Health Service, Department of Health and Human Services. (1990). *A national plan for Native American mental health services*. Rockville, MD: Author.
- Indian Health Service. (2014). *Health trends*:
https://www.ihs.gov/dps/includes/themes/newihstheme/display_objects/documents/Trends2014Book508.pdf. Rockville, MD: Author.
- Kelly, A.E., & Achter, J.A. (1995). Self-concealment and attitudes toward counseling in university students. *Journal of Counseling Psychology*, 42, 40-46.
- Kline, R.B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York, NY: Guilford Press.
- Komiya, N., & Eells, G.T. (2001). Predictors of attitudes toward seeking counseling among international students. *Journal of College Counseling*, 4(2), 153-160.
- Komiya, N., Good, G.E., & Sherrod, N.B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology*, 47(1), 138-143.
- Kroenke, K., & Spitzer, R. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals*, 32(9), 1-7.
- Kulis, S., Wagaman, M., Tso, C., & Brown, E. (2013). Exploring Indigenous identities of urban American Indian youth of the Southwest. *Journal of Adolescent Research*, 28(3), 271-298.

- Kushner, M.G., & Sher, K.J. (1991). The relation of treatment fearfulness and psychological service utilization: An overview. *Professional Psychology: Research and Practice*, 22(3), 196-203.
- LaFromboise, T.D., Trimble, J.E., & Mohatt, G.V. (1990). Counseling intervention and American Indian tradition: An integrative approach. *The Counseling Psychologist*, 18, 628-654.
- Leaf, P.J. & Bruce, M.L. (1987). Gender differences in the use of mental-health related services: A reexamination. *Journal of Health and Social Behavior*, 28, 171-183.
- Lee, S.Y., Martins, S.S., Keyes, K.M., & Lee, H.B. (2011) Mental health service use by persons of Asian ancestry with DSM-IV mental disorders in the United States. *Psychiatric Services*, 62(10), 1180-1186.
- Leech, N.L. (2007). Cramer's model of willingness to seek counseling: a structural equation model for counseling students. *The Journal of Psychology*, 141(4), 435-445.
- Leong, F.T.L., & Zachar, P. (1999). Gender and opinions about mental illness as predictors of attitudes toward seeking psychological help. *British Journal of Guidance & Counselling*, 27(1), 123-132.
- Leong, F.T.L., Wagner, N.S., & Tata, S.P. (1995). Racial and ethnic variations in help-seeking attitudes. In J.G. Ponterotto, J.M. Casas, L.A. Suzuki, & C.M. Alexander (Eds.), *Handbook of multicultural counseling* (p. 415-438). Thousand Oaks, Ca: Sage.

- Levinson, D.R. (2011). Access to mental health services at Indian Health Service and tribal facilities. *Department of Health and Human Services Inspector General Report*.
- Liao, H.Y., Round, J., & Klein, A.G. (2005). A test of Cramer's (1999) help-seeking model and acculturation effects with Asian and Asian American college students. *Journal of Counseling Psychology*, 52(3), 400-411.
- Mallinckrodt, B., Abraham, W.T., Wei, M., & Russell, D.W. (2006). Advances in testing the statistical significance of mediation effects. *Journal of Counseling psychology*, 53, 372-378.
- Manson, S.M. (1986). Recent advances in American Indian mental health research: Implications for clinical research and training. In M.R. Miranda & M.L. Kitano (Eds.), *Mental health research and practice in minority communities: Development of culturally sensitive training programs* (pp. 72-93). Rockville, MD: National Institute of Mental Health.
- Manson, S.M., & Trimble, J.E. (1982). American Indian and Alaska Native communities: Past efforts, future inquiries. In L.R. Snowden (Ed.), *Reaching the underserved: Mental health needs of neglected populations*, (pp. 143-163). SAGE Annual Reviews of Community Mental Health, Vol. 3. Beverly Hills: SAGE.
- Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224-253.
- Maxwell, S.E. (2000). Sample size and multiple regression analysis. *Psychological Methods*, 5(4), 434-458.

- McCarthy, J., Pfohl, A.H., & Bruno, M. (2010). Help seeking among counseling trainees: An exploratory study. *Journal of Counseling Research and Practice*, 1(1), 53-63.
- McCormick, R.M. (1995). The facilitation of healing for the First Nations people of British Columbia. *Canadian Journal of Native Education*, 21(2), 251-319.
- McKenzie, J., Jackson, A., Smith, S., & Crotty, A. (2013). Career Dilemmas among Diné (Navajo) college graduates: An exploration of the Dinétah (Navajo Nation) brain drain. *The International Indigenous Policy Journal*, 4(4). Retrieved from: <http://ir.lib.uwo.ca/iipj/vol4/iss4/5>
- Milville, M.L., & Constantine, M.G. (2006). Sociocultural predictors of psychological help-seeking attitudes and behavior among Mexican American college students. *Cultural Diversity and Ethnic Minority Psychology*, 12(3), 420-432.
- Miranda, J., Nakamura, R., & Bernal, G. (2003). Including ethnic minorities in mental health intervention research: A practical approach to a long-standing problem. *Culture, Medicine, and Psychiatry*, 27, 467-486.
- Nam, S.K., Chu, H.J., Lee, M.K., Lee, J.H., Kim, N., & Lee, S.M. (2010). A meta-analysis of gender differences in attitudes toward seeking professional psychological help. *Journal of American College Health*, 59, 110-116.
- Narrow, W.E., Regier, D.A., Norquist, G., Rae, D.S., Kennedy, C., & Arons, B. (2000). Mental health service use by Americans with severe mental illnesses. *Social Psychiatry and Psychiatric Epidemiology*, 35, 147-155.
- Neighbors, H.W., Caldwell, C., Williams, D.R., Nesse, R., Taylor, R.J., Bullard, K.M., Torres, M., & Jackson, J.S. (2007). Race, ethnicity, and the use of services for mental disorders. *Archives of General Psychiatry*, 64, 485-494.

- Nocins, D., Beals, J., Moore, L., Spicer, P., Manson, S., & the AI-SUPERPFP Team. (2004). Use of biomedical services and traditional healing options among American Indians: sociodemographic correlates, spirituality, and ethnic identity. *Medical Care*, 42, 670-679.
- Notani, A.S. (1998). Moderators of perceived behavioral control's predictiveness in the theory of planned behavior: A meta-analysis. *Journal of Consumer Psychology*, 7, 247-271.
- Nouroozifar, M., & Zangeneh, M. (2006). Mental health and addiction state of ethnocultural/racial communities. *International Journal of Mental Health and Addiction*, 4(4), 288-293.
- Obasi, E.M., & Leong, F.L. (2009). Psychological distress, acculturation, and mental health-seeking attitudes among people of African descent in the United States: A preliminary investigation. *Journal of Counseling Psychology*, 56(2), 227-238.
- Pederson, E.L., & Vogel, D.L. (2007). Men's gender role conflict and their willingness to seek counseling: A mediation model. *Journal of Counseling Psychology*, 54, 373-384.
- Price, B.K., & MacNeill, B.W. (1992). Cultural commitment and attitudes toward seeking counseling services in American Indian college students. *Professional Psychology: Research and Practice*, 23(5), 376-381.
- Price, B.K., & McNeill, B.W. (1992). Cultural commitment and attitudes toward seeking counseling services in American Indian college students. *Professional Psychology: Research and Practice*, 23(5), 376-381.

- Randall, D.M., & Wolff, J.A. (1994). The time interval in the intention-behavior relationship: Meta-analysis. *British Journal of Social Psychology*, 19, 406-422.
- Reynolds, A.L., Sodano, S.M., Ecklund, T.R., & Guyker, W. (2012). Dimension of Acculturation in Native American college students. *Measurement and evaluation in counseling and development*, 45(2), 101-112.
- Richman, L.S., Kohn-Wood, L.P., Williams, D.R. (2007). The role of discrimination and racial identity for mental health service utilization. *Journal of Social and Clinical Psychology*, 26(8), 960-981.
- Roh, S., Brown-Rice, K.A., Lee, K.H., Lee, Y.S., Yee-Melichar, D., & Talbot, E.P. (2015). Attitudes toward mental health services among American Indians by two age groups. *Community Mental Health Journal*, 51(8), 970-977.
- Rosenfield, S. (1999). Gender and mental health: Do women have more psychopathology, men more, or both the same (and why?) In A.V. Horwitz & T.L. Scheid (Eds.), *A handbook for the study of mental health: Social contexts, theories, and systems* (p. 348-360). New York: Cambridge University Press.
- Sanders, D. (1987) Cultural conflicts: An important factor in the academic failures of American Indian students. *Journal of Multicultural Counseling and Development*, 15, 81-90.
- Scheel, R., Prieto, L.R., & Biermann, J. (2011). American Indian college student suicide: risk, beliefs, and help-seeking preferences. *Counselling Psychology Quarterly*, 24(4), 277-289.

- Sheeran, P., Norman, P., & Orbell, S. (1999). Evidence that intentions based on attitudes better predict behavior than intentions based on subjective norms. *European Journal of Social Psychology*, 29(2/3), 403-406.
- Silva de Crane, R., & Spielberger, C.D. (1981). Attitudes of Hispanic, Black, and Caucasian university students toward mental illness. *Hispanic Journal of Behavioral Sciences*, 3, 241-255.
- Smonds, V., Goins, R., Krantz, E., & Garrouette, E. (2014). Cultural identity and patient trust among older American Indians. *Journal of General Internal Medicine* 29(3), 500-506.
- Smith, L. (2005). Psychotherapy, classism and the poor: Conspicuous by their absence. *American Psychologist*, 60(7), 687-696.
- Snowden, L.R. (1999). African American service use for mental health problems. *Journal of Community Psychology*, 27(3), 303-313.
- Stefl, M.E., & Prosperi, D. (1985). Barriers to mental health service utilization. *Community Mental Health Journal*, 21(3), 167-178.
- Sue, D.W., & Sue, D. (2002). *Counseling the culturally diverse: Theory and practice* (4th ed.). New York: John Wiley.
- Sue, S. (1983). Community mental health services to minority groups: Some optimism, some pessimism. *American Psychologist*, 32, 616-624.
- Sue, S., Allen, D.B., & Conaway, L. (1981). The responsiveness and equality of mental health care to Chicanos and Native Americans. *American Journal of Community Psychology*, 6, 137-146.

- Tabachnick, B.G., & Fidell, L.S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn & Bacon.
- Thomason, T.C. (1991). Counseling Native Americans: An introduction for non-Native American counselors. *Journal of Counseling and Development*, 69(4), 321-327.
- Thomason, T. (2011). Best practices in counseling Native Americans. *Journal of Indigenous Research*, 1(3), 1-4.
- Thomason, T. (2012). Recommendations for counseling Native Americans: Results of a survey. *Journal of Indigenous Research*, 1(2), 4-11.
- U.S. Bureau of the Census. (2010). *2010 Census counts of American Indians, Eskimos, or Aleuts and American Indian and Alaska Native areas*. Washington, D.C.: Author.
- Venner, K., Greenfield, B., Vicuna, B., Munoz, R., Bhatt, S., & O'Keefe, V. (2012). "I'm not one of them:" Barriers to help-seeking among American Indians with alcohol dependence. *Cultural Diversity and Ethnic Minority Psychology*, 18, 352-362.
- Vogel, D.L., & Wei, M. (2005). Adult attachment and help-seeking intent: The mediating roles of psychological distress and perceived social support. *Journal of Counseling Psychology*, 52(3), 347-357.
- Vogel, D.L., & Wester, S.R. (2003). To seek help or not to seek help: The risks of self-disclosure. *Journal of Counseling Psychology*, 50(3), 351-361.
- Vogel, D.L., Heimerdinger-Edwards, S.R., Hammer, J.H., & Hubbard, A. (2011). "Boys don't cry": Examination of the links between endorsement of masculine norms, self-stigma, and help-seeking attitudes for men from diverse backgrounds. *Journal of Counseling Psychology*, 58(3), 368-382.

- Vogel, D.L., Wade, N.G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology*, 53(3), 325-337.
- Vogel, D.L., Wade, N.G., & Hackler, A.H. (2007). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology*, 54(1), 40-50.
- Vogel, D.L., Wester, S.R., & Larson, L.M. (2007). Avoidance of counseling: Psychological factors that inhibit seeking help. *Journal of Counseling & Development*, 85(4), 410-422.
- Vogel, D.L., Wester, S.R., Wei, M., & Boysen, G.A. (2005). The role of outcome expectations and attitudes on decisions to seek professional help. *Journal of Counseling Psychology*, 52(4), 459-470.
- Wallace, B.C., & Constantine, M.G. (2005). Africentric cultural values, psychological help-seeking attitudes, and self-concealment in African American college students. *Journal of Black Psychology*, 31(4), 369-385.
- Wexler, L., Chandler, M., Gone, J.P., Cwik, M., Kirmayer, L.J., LaFromboise, T., ... Allen, J. (2015). Advancing suicide prevention research with rural American Indian and Alaska Native populations. *American Journal of Public Health*, 105(5), 891-899.
- Wiseman, H., Guttfreund, D.G., & Lurie, I. (1995). Gender differences in loneliness and depression in university students seeking counselling. *British Journal of Guidance and Counseling*, 23, 231-243.
- Witko, T.M. (2006). *Mental health care for urban Indians*. Washington, D.C.: American Psychological Association.

Wolsko, C., Lardon, C., Mohatt, G.V., & Orr, E. (2007). Stress, coping, and well-being among the Yup'ik of the Yukon-Kuskokwim delta: The role of enculturation and acculturation. *International Journal of Circumpolar Health*, 66, 51-61.

APPENDIX A

Native American Acculturation Scale (NAAS; Garrett & Pichette, 2000)

This questionnaire will collect information about your background and cultural identity. For each item, choose the *one* answer that best describes you by filling in the blank.

1. What language do you speak?
 1. Tribal language only (e.g., Cherokee, Navajo, and Lakota)
 2. Mostly tribal language, some English
 3. Tribal language and English about equally well (bilingual)
 4. Mostly English, some tribal language
 5. English only
2. What language do you prefer?
 1. Tribal language only (e.g., Cherokee, Navajo, and Lakota)
 2. Mostly tribal language, some English
 3. Tribal language and English about equally well (bilingual)
 4. Mostly English, some tribal language
 5. English only
3. How do you identify yourself?
 1. Native American
 2. Native American and some non-Native American (e.g., White, African American, Latino, and Asian American)
 3. Native American and non-Native American (bicultural)
 4. Non-Native American and some Native American
 5. Non-Native American (e.g., White, African American, Latino, and Asian American)
4. Which identification does (did) your mother use?
 1. Native American
 2. Native American and some non-Native American (e.g., White, African American, Latino, and Asian American)
 3. Native American and non-Native American (bicultural)
 4. Non-Native American and some Native American
 5. Non-Native American (e.g., White, African American, Latino, and Asian American)
5. Which identification does (did) your father use?
 1. Native American

2. Native American and some non-Native American (e.g., White, African American, Latino, and Asian American)
 3. Native American and non-Native American (bicultural)
 4. Non-Native American and some Native American
 5. Non-Native American (e.g., White, African American, Latino, and Asian American)
6. What was the ethnic origin of friends you had as a child up to age 6?
1. Only Native Americans
 2. Mostly Native Americans
 3. About equally Native Americans and non-Native Americans
 4. Mostly non-Native Americans (e.g., Whites, African Americans, Latinos, and Asian Americans)
 5. Only non-Native Americans
7. What was the ethnic origin of friends you had as a child from age 6 to 18?
1. Only Native Americans
 2. Mostly Native Americans
 3. About equally Native Americans and non-Native Americans
 4. Mostly non-Native Americans (e.g., Whites, African Americans, Latinos, and Asian Americans)
 5. Only non-Native Americans
8. Who do you associate with now in your community?
1. Only Native Americans
 2. Mostly Native Americans
 3. About equally Native Americans and non-Native Americans
 4. Mostly non-Native Americans (e.g., Whites, African Americans, Latinos, and Asian Americans)
 5. Only non-Native Americans
9. What music do you prefer?
1. Native American music only (e.g., pow-wow music, traditional flute, contemporary, and chant)
 2. Mostly Native American music
 3. Equally Native American and other music
 4. Mostly other music (e.g., rock, pop, country, and rap)
 5. Other music only
10. What movies do you prefer?
1. Native American movies only
 2. Mostly Native American movies
 3. Equally Native American and other movies
 4. Mostly other movies
 5. Other movies only

11. Where were you born?
 1. Reservation, Native American community
 2. Rural area, Native American community
 3. Urban area, Native American community
 4. Urban or Rural area, near Native American community
 5. Urban or Rural area, away from Native American community
12. Where were you raised?
 1. Reservation, Native American community
 2. Rural area, Native American community
 3. Urban area, Native American community
 4. Urban or Rural area, near Native American community
 5. Urban or Rural area, away from Native American community
13. What contact have you had with Native American communities?
 1. Raised for 1 year or more on the reservation or other Native American community
 2. Raised for 1 year or less on the reservation or other Native American community
 3. Occasional visits to the reservation or other Native American community
 4. Occasional communication with people on reservation or other Native American community
 5. No exposure or communications with people on reservation or other Native American community
14. What foods do you prefer?
 1. Native American foods only
 2. Mostly Native American foods and some other foods
 3. About equally Native American foods and other foods
 4. Mostly other foods
 5. Other foods only
15. In what language do you think?
 1. Tribal language only (e.g., Cherokee, Navajo, and Lakota)
 2. Mostly tribal language, some English
 3. Tribal language and English about equally well
 4. Mostly English, some tribal language
 5. English only
16. Do you
 1. Read only a tribal language (e.g., Cherokee, Navajo, and Lakota)
 2. Read a tribal language better than English
 3. Read both a tribal language and English about equally well
 4. Read English better than a tribal language
 5. Read only English

17. Do you
 1. Write only a tribal language (e.g., Cherokee, Navajo, and Lakota)
 2. Write a tribal language better than English
 3. Write both a tribal language and English about equally well
 4. Write English better than a tribal language
 5. Write only English
18. How much pride do you have in Native American culture and language?
 1. Extremely proud
 2. Moderately proud
 3. A little pride
 4. No pride, but do not feel negative toward group
 5. No pride, but do feel negative toward group
19. How would you rate yourself?
 1. Very Native American
 2. Mostly Native American
 3. Bicultural
 4. Mostly non-Native American
 5. Very non-Native American
20. Do you participate in native American traditions, ceremonies, occasions, and so on?
 1. All of them
 2. Most of them
 3. Some of them
 4. A few of them
 5. None at all

APPENDIX B

Intentions to Seek Counseling Inventory (ISCI) (Cash et. Al., 1975; Kelly & Acher, 1995)

Instructions. Below is a list of issues people commonly bring to counseling. How likely would you be to seek counseling if you were experiencing these problems? Please circle the corresponding answer.

	Very unlikely 1	Unlikely 2	Likely 3	Very likely 4
1. Weight Control	1	2	3	4
2. Excessive Alcohol use	1	2	3	4
3. Relationship differences	1	2	3	4
4. Concerns about sexuality	1	2	3	4
5. Depression	1	2	3	4
6. Conflict with parents	1	2	3	4
7. Speech anxiety	1	2	3	4
8. Difficulties dating	1	2	3	4
9. Choosing a major	1	2	3	4
10. Difficulty in sleeping	1	2	3	4
11. Drug problems	1	2	3	4
12. Inferiority Feelings	1	2	3	4
13. Test anxiety	1	2	3	4
14. Difficulty with friends	1	2	3	4
15. Academic work procrastination	1	2	3	4
16. Self-understanding	1	2	3	4
17. Loneliness	1	2	3	4

APPENDIX C

Patient Health Questionnaire- 9 (PHQ-9)

Over the <i>last 2 weeks</i> , how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

(For office coding: Total Score ____ = ____ + ____ + ____)

From the Primary Care Evaluation of Mental Disorders Patient Health Questionnaire

(PRIME-MD PHQ). The PHQ was developed by Drs. Robert L. Spitzer, Janet BW

Williams, Kurt Kroenke, and colleagues.

APPENDIX D

Barriers To Access To Care Evaluation (Bace V3)¹ (Clement et al., 2012)

Below you can see a list of things which can stop, delay or discourage people from getting professional care for a mental health problem, or continuing to get help. By professional care we mean care from such staff as a GP (family doctor), community mental health team (e.g. care coordinator, mental health nurse or mental health social worker), psychiatrist, counsellor, psychologist or psychotherapist.

Have any of these issues ever stopped, delayed or discouraged you from getting, or continuing with, professional care for a mental health problem?

Please circle one number on each row to indicate the answer that best suits you.

For 'not applicable' e.g. if it is a question about children and you do not have children, please cross the Not applicable box.

	Issue	This has stopped, delayed or discouraged me NOT AT ALL	This has stopped, delayed or discouraged me A LITTLE	This has stopped, delayed or discouraged me QUITE A LOT	This has stopped, delayed or discouraged me A LOT
1.	Being unsure where to go to get professional care	0	1	2	3
2.	Wanting to solve the problem on my own	0	1	2	3
3.	Concern that I might be seen as weak for having a mental health problem	0	1	2	3
4.	Fear of being put in hospital against my will	0	1	2	3
5.	Concern that it might harm my chances when applying for jobs Not applicable <input type="checkbox"/>	0	1	2	3
6.	Problems with transport or travelling to appointments	0	1	2	3

7.	Thinking the problem would get better by itself	0	1	2	3
8.	Concern about what my family might think, say, do or feel	0	1	2	3
9.	Feeling embarrassed or ashamed	0	1	2	3
10.	Preferring to get alternative forms of care (e.g. traditional / religious healing or alternative / complementary therapies)	0	1	2	3
11.	Not being able to afford the financial costs involved	0	1	2	3
12.	Concern that I might be seen as 'crazy'	0	1	2	3
13.	Thinking that professional care probably would not help	0	1	2	3
14.	Concern that I might be seen as a bad parent Not applicable <input type="checkbox"/>	0	1	2	3
15.	Professionals from my own ethnic or cultural group not being available	0	1	2	3
16.	Being too unwell to ask for help	0	1	2	3
17.	Concern that people I know might find out	0	1	2	3
18.	Dislike of talking about my feelings, emotions or thoughts	0	1	2	3
19.	Concern that people might not take me seriously if they found out I was having professional care	0	1	2	3
20.	Concerns about the treatments available (e.g. medication side effects)	0	1	2	3
21.	Not wanting a mental health problem to be on my medical records	0	1	2	3

22	Having had previous bad experiences with professional care for mental health	0	1	2	3
23	Preferring to get help from family or friends	0	1	2	3
24	Concern that my children may be taken into care or that I may lose access or custody without my agreement Not applicable <input type="checkbox"/>	0	1	2	3
25	Thinking I did not have a problem	0	1	2	3
27	Difficulty taking time off work Not applicable <input type="checkbox"/>	0	1	2	3
28	Concern about what people at work might think, say or do Not applicable <input type="checkbox"/>	0	1	2	3
29	Having problems with childcare while I receive professional care Not applicable <input type="checkbox"/>	0	1	2	3
30	Having no one who could help me get professional care	0	1	2	3

1. Barriers to Care Evaluation (BACE) Scale (v3) Institute of Psychiatry, King's College London © 2011. For permission to use and a copy of the manual, please contact Dr Sarah Clement sarah.clement@kcl.ac.uk or Professor Graham Thornicroft, graham.thornicroft@kcl.ac.uk.

APPENDIX E

Attitudes Towards Seeking Professional Psychological Help-Short Form (Fischer & Farina, 1995)

Instructions. Read each statement carefully and indicate your degree of agreement using the scale below.

	Disagree 0	Partly disagree 1	Partly agree 2	Agree 3
1.	If I believed I was having a mental breakdown, my first inclination would be to get professional attention.		0	1 2 3
2.	The idea of talking about problems with a counselor strikes me as a poor way to get rid of emotional conflicts.		0	1 2 3
3.	If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.		0	1 2 3
4.	There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.		0	1 2 3
5.	I would want to get psychological help if I were worried or upset for a long period of time.		0	1 2 3
6.	I might want to have psychological counseling in the future.		0	1 2 3
7.	A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.		0	1 2 3
8.	Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.		0	1 2 3
9.	A person should work out his or her own problems; getting psychological counseling would be a last resort.		0	1 2 3
10.	Personal and emotional troubles, like many things, tend to work out by themselves.		0	1 2 3

APPENDIX F



DU IRB Approval Date:

Valid for Use Through:

University of Denver Consent Form for Participation in Research

Title of Research Study: Help-seeking attitudes and behaviors: Factors influencing differences among urban versus reservation-dwelling Navajo tribal members

Researcher: Chesleigh N. Keene, MA, PhD Candidate, University of Denver

Study Site: Online Survey

Purpose

You are being asked to participate in a research study. The purpose of this research is to investigate factors related to the attitudes and behaviors of seeking psychological help among Navajo tribal members. Results will be used to better understand how Navajo tribal members feel about psychological services and how they handle psychological concerns.

Procedures

If you participate in this research study, you will be invited to fill out an online survey. Participation in this study should take about 15-20 minutes of your time. The survey questions will ask if you live in an urban area or on the reservation, about your experiences of psychological concerns (anxiety, depression), access to psychological services, cultural identification, and willingness to seek psychological services.

Before you begin, please note that the data you provide may be collected and used by Qualtrics as per its privacy agreement. This research is only for U.S. residents over the age of 18 (or 19 in Nebraska). Please be mindful to respond in private and through a secured Internet connection for your privacy. Your confidentiality will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties.

Voluntary Participation

Participating in this research study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to answer survey questions or complete the survey for any reason without penalty or other benefits to which you are entitled.

Risks or Discomforts

The risks associated with this project are minimal. If, however, you experience discomfort you may discontinue participation at any time. Should you experience distress greater than what is anticipated, you are urged to contact a mental health provider or an appropriate resource for your concerns (National Suicide hotline, 1-800-273-8255; Substance Abuse and Mental Health Services Administration hotline for general mental health/addiction information, 1-877-726-4727). I respect your right to choose not to answer questions that make you uncomfortable. Refusal to participate or withdrawal of participation will involve no penalty or loss of benefits to which you are entitled.

Benefits

Possible benefits of participation include possibly gaining an understanding the unique experiences of the Navajo tribe, which can better inform future mental health efforts in urban and reservation communities. It can also clarify preferences for psychological treatment. This is a contribution to the tribe, their wider community, and to the field of psychology.

Incentives to participate

If you do choose to participate in this study, you will be entered into a drawing for one of ten \$25 Amazon gift cards. The drawing will occur when enough responses are collected. The gift cards can be

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Version: 05/20/2017

DU IRB Approval Date:

Valid for Use Through:

mailed or emailed, depending on your preference. You will be notified if your name is drawn by telephone number or email address you provide.

Confidentiality

The researcher will keep your information safe throughout this study. Your individual identity will be kept private when information is presented or published about this study. Your survey will be identified by code number only. This is done to protect the confidentiality of your responses. Should you choose to enter the drawing, you will provide your name and point of contact. Only the researcher will have access to your individual data and any reports generated as a result of this study will use only group averages and paraphrased wording. However, should any information contained in this study be the subject of a court order or lawful subpoena, the University of Denver might not be able to avoid compliance with the order or subpoena. Although no questions in this interview address it, we are required by law to tell you that if information is revealed concerning suicide, homicide, or child abuse and neglect, it is required by law that this be reported to the proper authorities.

Questions

If you have any questions about this project or your participation, please feel free to ask questions now or contact **Chesleigh Keene** at (801) 824-8691 or Chesleigh.Keene@du.edu at any time. **Dissertation Chair: Patton Garriott, PhD, Pat.Garriott@du.edu.**

If you have any questions or concerns about your research participation or rights as a Navajo tribal member, you may contact the Navajo Nation Human Research Review Board by mailing PO Box 1390, Window Rock, AZ, 86515 or calling (928) 871-6929. The Board Chair of the NNHRRB is Mrs. Beverly Recenti-Pigman.

If you have any questions or concerns about your research participation or rights as a participant, you may contact the DU Human Research Protections Program by emailing IRBAdmin@du.edu or calling (303) 871-2121 to speak to someone other than the researchers.

Please take all the time you need to read through this document and decide whether you would like to participate in this research study.
If you decide to participate, your completion of the research procedures indicates your consent.
Please keep this form for your records.

Project Overview

[992987-2] Help-seeking attitudes and behaviors: Factors influencing differences among urban versus reservatio...

You have Full access to this project. (Edit)	
Research Institution	University of Denver (Colorado Seminary), Denver, CO
Title	Help-seeking attitudes and behaviors: Factors influencing differences among urban versus reservation-dwelling Navajo tribal members
Principal Investigator	Keene, Chesleigh, MA
Keywords	Native Americans, Help Seeking,

The documents for this project can be accessed from the [Designer](#).

Project Status as of: 04/29/2018

Reviewing Board	Initial Approval Date	Project Status	Expiration Date
University of Denver (DU) IRB, Denver, CO	06/30/2017	Active	06/29/2018

Package 992987-2 is: Locked

Package 2 of 2 | [Jump](#) ▼

Submitted To	Submission Date	Submission Type	Board Action	Effective Date	
University of Denver (DU) IRB, Denver, CO	08/16/2017	Amendment/Modification	Approved	08/17/2017	Review Details

Shared with the following users:

User	Organization	Access Type
Garriott, Patton	University of Denver (Colorado Seminary), Denver, CO	Full
Keene, Chesleigh	University of Denver (Colorado Seminary), Denver, CO	Full