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Coping Styles As Mediators Between American Indian Cultural Identification And Life Satisfaction

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COPING STYLES AS MEDIATORS BETWEEN AMERICAN INDIAN CULTURAL
IDENTIFICATION AND LIFE SATISFACTION

By

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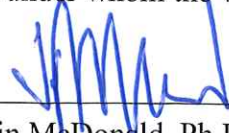in partial fulfillment of the requirements

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This thesis, submitted by Micah L. Prairie Chicken in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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This thesis is being submitted by the appointed advisory committee as having met all of the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

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ii

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Title	Coping Styles as Mediators between American Indian Cultural Identification and Life Satisfaction
Department	Psychology
Degree	Master of Arts

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Abstract

The current study is a cross-sectional examination of the relationships between American Indian cultural identification, individualistic coping, collectivistic coping, and life satisfaction. Specifically, the purpose of this study was to examine whether collectivistic and individualistic coping styles mediated the relationship between American Indian cultural identification (high cultural identification vs. low cultural identification) and life satisfaction. In other words, this study sought to understand if traditional American Indian culture provides any unique buffering effects against stress via coping styles. Several regressions were run on the mediation model which suggested no significant relationship between American Indian cultural identification and life satisfaction. These results are inconsistent with previous findings on how cultural identification relates to life satisfaction.

Keywords: American Indian; Biculturalism; Coping styles; Ethnicity; Life satisfaction

Introduction

There are 562 federally recognized American Indian (AI) tribes in the United States spread across 34 states. Davis, Roscigno, and Wilson (2016) wrote that 77% percent of American Indian reservations have levels of poverty that are above the national average. In addition to economic disparities, AIs also face major health disparities. The leading cause of death among AIs is cardiovascular disease in which they experience 16% higher rates than the general United States population and the highest among other racial minority groups (Galloway, 2005; Jacobs-Wingo et al., 2016). American Indians also experience higher death due to cancer, unintentional injury, diabetes, liver disease, suicide, and stroke than the general United States (U.S.) population (Jacobs-Wingo, 2016).

Additionally, AIs experience higher rates of symptoms related to post-traumatic stress disorder (PTSD). Beals et al. (2013) conducted a study examining the prevalence of PTSD symptomology in two AI groups, one in the Northern Plains and the other in the Southwest, and compared the results to the general U.S. population. Myer, Lewis, and Parker-Dominquez (2003) wrote that one reason for this disparity in health outcomes could be traced to chronic activation of the stress response system (i.e., allostatic load). To counter these deleterious effects of stress, understanding how AIs cope with stress should be a high priority among researchers.

Coping

Individualistic Coping

The field of stress and coping has largely emerged only recently. Lazarus and Folkman's (1984) model of stress and coping stated that stress results from several cognitive processes. They stated that individuals will appraise a daily life event as either: (1) negative (i.e., threatening), (2) positive (i.e., non-threatening), or neutral. After the primary appraisal process

1

occurs, the individual will then make a secondary appraisal, which includes the individual deciding if they have the coping resources to handle the threatening event. They wrote that there are two types of broad coping resources, including internal and external resources. Internal coping resources include things such as will power, confidence, inner strength, and intelligence, among others. External coping resources include things such as access to professional help, social networks, and family, among other things. The individual with appraise their coping abilities as either: (1) positive (i.e., they have the resources to handle the event), or (2) negative (i.e., they do not have the resources to handle the event). Finally, they state that, based on these two appraisals, the individual determines: (1) they do not have the appropriate internal and/or external coping resources to deal with the perceived threat and experience a negative stress reaction (i.e., stress they cannot adequately deal with), or (2) they do have the appropriate internal and/or external resources to deal with the perceived threat and experience a positive stress reaction (i.e., stress they can adequately deal with).

Coping was originally thought of as either problem focused, or emotion focused (Carver, Schneider, & Weintraub, 1989). Whereas problem focused coping is the act of taking direct action to alter the source of stress to reduce stress, emotion focused coping is the act of attempting to moderate the emotions that result from experiencing stress rather than taking direct action against the source of stress. More recently, Folkman (2010) identified a third type of coping called meaning-focused coping. Meaning-focused coping is when individuals draw on their positive emotions to deal with stress, whereas previous theories of coping only dealt with moderating negative emotions (Folkman, 2010). As stated previously, the findings of these coping studies primarily drew from the majority population, leaving how cultural minorities deal with stress neglected.

Collectivistic coping

Coping research has largely focused on Western styles of coping, which is viewed as individualistic coping. In reaction to this, Yeh, Arora, and Wu (2006) put forth a collectivistic model of coping which includes seven facets: (1) family support, (2) respect for authority figures, (3) intracultural coping, (4) relational universality, (5) forbearance, (6) social activity, and (7) fatalism. One limitation to these studies is that they have only focused on Asian American populations.

Individuals from collectivistic cultures are more likely to have an interdependent self-construal, or, they view themselves within the context of others that are important to them, which is the opposite of individualistic cultures where independence is valued (Markus & Kitayama, 1991). Additionally, individuals from collectivistic cultures have been shown to be more reliant on family systems, especially elders, for support in stressful situations rather than outsiders (e.g., mental health professionals) than individuals from individualistic cultures (Daly, Jennings, Beckett, & Leashore, 1995; Sue & Sue, 2003; Yeh & Wang, 2000).

Individuals from collectivistic cultures have been shown to have a deep respect for authority figures (e.g., elders, healers, etc.) from their cultures. Sue and Sue (2003) wrote that individuals from collectivistic cultures are more likely to seek help for mental health issues from respected individuals from their culture than from outsiders. In this sense, respect for authority figures seems to overlap with family as a source of support, as they are often one in the same.

Yeh, Arora, and Wu (2006) wrote that intracultural coping is defined as "supportive networks" that are comprised of individuals who are phenotypically similar. Having these "supportive networks" gives guidance to individuals from racially similar others.

Individuals from collectivistic cultures tend to conceptualize themselves within the context of others and their environments (Markus & Kitayama, 1991; Yeh, Arora, & Wu, 2006).

Forbearance is defined as the act of focusing on others when it comes to relationships and maintaining social harmony over individualistic needs (Markus & Kitayama, 1991; Wong & Wong, 2006). In other words, forbearance is when an individual withholds their viewpoints (e.g., thoughts, criticisms, etc.) when it may disrupt social harmony with others.

Regarding social activity, Yeh, Arora, and Wu (2006) wrote that individuals from collectivistic cultures tend to turn towards others from their own culture as a means of coping. For example, Yeh and Wang (2000) found that Asian American undergraduate and graduate students had negative attitudes towards using mental health professionals to cope with their stresses and viewed turning towards parents and siblings as a more likely option. In their review of relevant literature, Yeh, Arora, and Wu (2006) found that collectivistic individuals used social support systems more than White individuals to cope with stress.

Regarding fatalism, Morling and Fiske (1999) wrote, "people adjust to things as they are, accepting what their roles, their relationships with others, luck, fate, or God will bring, without acting directly on the environment" (p.382). In other words, individuals from collectivistic cultures tend to accept their fate in relation to their places in life. Conversely, individuals from individualistic cultures will attempt to attain mastery of themselves, their relationships, and their environments as a form of primary control.

Yeh, Arora, and Wu's (2006) model of collectivistic coping is one of the more thorough models of collectivistic coping in the literature, but, again, it is limited to their examination of Asian American individuals.

Another thorough conceptualization of collectivistic coping came from Heppner et al. (2006). Heppner et al. (2006) developed a theory of collectivistic coping based on three conceptual bases. The first conceptual base was on Asian values, including collectivism, avoiding family shame, maintenance of interpersonal harmony, respect for elders, and filial piety, among others, which was informed from literature and focus groups. The second conceptual base was based on primary and secondary control. Primary control is when individuals directly manipulate their environment to reduce their stress levels, which is often regarded as a Western value. Secondary control is when individuals use "accommodation and reframing" when dealing with their environment to moderate their stress levels, which is often regarded as an Eastern value (Heppner et al., 2006, p. 108). Thirdly, Heppner et al. (2006) used the notion of "problem resolution" in conceptualizing collectivistic coping, which emphasizes using coping activities that maximize effectiveness in reducing stress levels.

Though the field of collectivistic coping is quickly developing, AI groups have largely been left out of these studies. Given this dearth in the literature, AIs within the scope of collectivistic coping should be examined.

American Indian Cultural Identity and Coping

Cultural Identity

In one of the earliest studies of its kind, Boggs (1958) examined the relationship between the parenting styles of traditional and non-traditional Ojibwa adults and the perceived "introverted" personality type of Ojibwa children. Boggs (1958) examined two Ojibwa communities with the same origin, but different cultural trajectories. One of the Ojibwa communities was isolated from the majority culture and had maintained traditional cultural patterns, which were described as having retained traditional subsistence hunting and gathering,

as well as kinship structures (e.g., cross-cousin marriages). Boggs (1958) described the non-traditional Ojibwa community as having been geographically located near mostly-White communities for several decades. This resulted in the people of this non-traditional community to engage in earning a living from non-traditional work such as logging and tourism. Additionally, the non-traditional Ojibwa people had departed from traditional kinship structure (e.g., ceasing cross-cousin marriages).

Boggs (1958) also observed differing parenting styles of these two communities. The mothers, as well as other family members, of the traditional community were nearly always present and made efforts to instantly comfort their crying infants through breast feeding and other forms of physical comfort. Conversely, the non-traditional mothers mostly bottle fed their infants and allowed them to self-comfort when they cried. Though no significant differences were found between the personality styles of the children of these two groups, the Boggs (1958) study was seminal in attempting to understand the effects of cultural identity among AIs.

The most resounding subject that the Boggs (1958) study pointed out was biculturalism in AIs. Biculturalism is when an individual identifies and operates within two cultures. Though this definition is simplistic, Newman (2005) detailed a much more nuanced and complex process of AI adolescents becoming bicultural. Newman (2005) wrote that the first step in this process is ethnic identity formation. Ethnic identity is defined as "belonging to an ethnic group and the part of one's thinking, perceptions, feelings, behavior that is due to ethnic group membership" (Newman, 2005). Newman (2005) stated that that development of ethnic identity involved both socialization and enculturation into the ethnic group. An individual would then repeat this process with a second identity formation and they would then be considered bicultural. A question that this process raises is, what is the result of an individual who may not be fully

competent in one or both of their identities? Conversely, what is the result of an individual who is fully competent in both of their identities?

As the field of research that addresses issues related to cultural identification within AI populations has evolved, so have the theories and models. For instance, bidirectional models were often used in the earliest days of AI cultural identification research. Venner, Wall, Lau, and Ehlers (2006) wrote of the shortcomings of these bidirectional models of cultural identification. Bidirectional models consist of a continuum in which one culture is on one side and the second culture is on the opposite side. These models only allow for an individual to fall on one point of this continuum. In other words, according to this model, an individual cannot be equally competent within two cultures, but rather, must be more competent in one or the other sides of a continuum. The obvious limitation to this is that many AIs are equally competent in both their traditional culture as well as the majority culture (Venner, Wall, Lau, & Ehlers, 2006).

The multidimensional model was the next evolution of model that assessed cultural identification and was more nuanced than the bidirectional models. In this model, identifying in one culture took into account more than a single indicator of cultural competence. For example, the multidimensional model took into account language fluency, the practice of traditional spiritual beliefs and so on (Venner, Wall, Lau, & Ehlers, 2006). The shortcoming of the multidimensional model was that it too, like the bidirectional model, ultimately placed an individual along a continuum where they had to identify with one culture more than the other (Venner, Wall, Lau, & Ehlers, 2006). The most contemporary model of cultural identification is the orthogonal model.

Oetting and Beauvais (1990-1991) proposed the orthogonal model (see Figure 1) and wrote that an individual's identification within one culture is separate from that same

individual's identification within another culture. Additionally, the orthogonal model included the aspects of the multidimensional model that assessed for competence within an individual's identified culture (e.g., language fluency, the practice of traditional spiritual beliefs, etc.). In an orthogonal measure, an individual may fall into one of four quadrants: (1) highly competent in both culture *A* and *B*, (2) highly competent in culture *A* and lesser competent in culture *B*, (3) highly competent in culture *B* and lesser competent in culture *A*, and (4) lowly competent in both culture *A* and *B* (Oetting & Beauvais, 1990-1991).

Along with proposing the orthogonal theory of biculturalism, Oetting and Beauvais (1990-1991) also developed a measure called the Orthogonal Cultural Identification Scale (OCIS). The OCIS was designed to assess the identity levels of several cultures (including AI culture) within adolescent populations. An issue that arose with the OCIS within the community that studies AI cultural identification is that the heterogeneous nature of AI cultures should make it difficult for a single measure to globally assess all AI cultures (Gonzalez & Bennett, 2011; LaFromboise, 1999; Venner, Wall, Lau, & Ehlers, 2006).

This literature establishes that there are meaningful differences in AI people who mostly identify with traditional AI culture and AI people who mostly identify with European American culture. Given these differences in AI cultural identification, how these individuals cope with stress should be examined as it has been established that culture moderates coping style (Kuo, 2010; Prelow, Tein, Roosa & Wood, 2000).

American Indian Coping Styles

AIs have rarely been the focus of coping studies. Much of the studies examining minority coping are related to Asian Americans, African Americans, and Latinx Americans.

In one of the more thorough studies examining coping styles in AIs, Wadsworth, Rieckmann, Benson, and Compas (2004) examined Navajo adolescents' responses to the Responses to Stress Questionnaire, an instrument that measures coping responses in adolescents (Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000). Reickmann, Benson, and Compas (2004) examined how well Navajo adolescents' RSQ responses loaded onto the RSQ's five-factor structure (primary control, secondary control, disengagement, involuntary engagement, involuntary disengagement), which was developed and normed with middle class, Caucasian adolescents. The study showed that the Navajo adolescents' responses adequately loaded onto the factor structure of the RSQ. However, the study did not examine any unique, culturally relevant, coping styles of the Navajo adolescents. In other words, the Navajo adolescents may have also been using coping strategies that were not being measured.

In another study examining coping in AI adolescents, Eitle and Eitle (2014) compared the use of coping styles between AI and Caucasian adolescents. This study used the Brief COPE (Carver, 1997) to measure coping styles among the participants. Caucasian adolescents were found to use several coping strategies significantly more than AI adolescents, including active coping, acceptance, and self-blame. AI adolescents were found to use denial significantly more than Caucasian adolescents. Otherwise, the two groups of adolescents were found to use coping strategies equally, including planning, positive reframing, humor, religion, emotional support, instrumental support, self-distraction, venting, and behavioral disengagement.

These two studies were the most thorough studies examining AI coping styles but included only adolescent participants. Other studies have examined adult AI coping, but only as a broad variable, rather than specific coping styles. Additionally, none of these studies examined AI within the scope of collectivism. Most literature that mentions collectivism regarding AIs,

asserts that AIs are collectivistic, but fail to provide empirical evidence. However, McCormick and Wong (2006) identified AI coping that fall under the previously mentioned conceptualizations of collectivistic coping including interdependence, spirituality, traditional healing, family and community, and turning to elders.

Purpose of the Present Study

The purpose of the present study is to examine if AI acculturation is related to coping with stress and life satisfaction among Northern Plains AI adults. Various levels of Northern Plains AI acculturation will be measured along with coping styles and life satisfaction to determine if cultural orientation plays a significant factor in life satisfaction via coping. Though some researchers are beginning to focus on the collectivistic coping, AIs have largely been left out of this field of study.

Hypotheses

I.   Coping style will mediate the relationship between traditional American Indian cultural identification and life satisfaction.

II. AIs who identify with traditional AI culture will engage in higher levels of collectivistic coping than AIs who identify with European American culture.

III. AIs who identify with European American culture will engage in higher levels of individualistic coping than AIs who identify with traditional AI culture.

Methods

Measures

Demographics. The demographics questionnaire asked about age, gender, tribal affiliation, education level, whether the participant attended boarding school, whether their

primary caregiver attended boarding school, participation in cultural activities, and whether the participant was encouraged by their primary caregiver to take part in their culture.

American Indian Biculturalism Inventory – Northern Plains (AIBI-NP). The AIBI-NP (McDonald, Ross, & Rose, 2014) is a 24-item self-report questionnaire that assesses levels of traditional AI and European American cultural identification. The items are on a Likert scale that ranges from 1 ("no comfort") to 4 ("complete comfort"). The individuals being assessed were categorized into one of four cultural identifications including traditional AI, European American, bicultural, or marginalized. The two subscales of the AIBI-NP are American Indian Cultural Identification (AICI) and European American Cultural Identification (EACI).

Collectivist Coping Styles (CCS). The CCS is a 49-item measure that assesses for collectivistic coping (Heppner et al., 2006). The items are on a Likert scale that ranges from 1 ("no help at all") to 5 ("a tremendous amount of help"). The CCS consists of five factors, including: (1) acceptance, reframing, and striving, (2) family support, (3) religion/spirituality, (4) avoidance and detachment, and (5) private emotional outlets.

Brief COPE. The Brief COPE is a 28-item measure that assesses for coping styles that are mostly independent ways of coping. There are 14 factors/variables within the Brief COPE an include (1) active coping, (2) planning, (3) positive reframing, (4) acceptance, (5) humor, (6) religion, (7) using emotional support, (8) using instrumental support, (9) self-distraction, (10) denial, (11) venting, (12) substance use, (13) behavioral disengagement, and (14) self-blame (Carver, 1997).

Satisfaction With Life Scale. The Satisfaction with Life Scale (SWLS) is a 5-item scale that measures satisfaction with life (Diener, Emmons, Larsen, & Griffin, 1985). The items are on a Likert scale that ranges from 1 ("strongly disagree") to 7 ("strongly agree"). The SWLS

was shown to have a coefficient alpha of .87 and a test-retest correlation coefficient of .82 (Diener, Emmons, Larsen, & Griffin, 1985).

Procedure

Participants were recruited by snowball sampling via social media. Two criteria needed to be met for the participants to be included in this study, including being 18 years old or older, and identifying primarily as American Indian. Once eligibility was met, participants were presented with informed consent. If informed consent is given, participants were given the questionnaire. 106 participants were needed for a medium effect size as determined by MedPower (Kenny, 2017). At the end of the survey, the participants were able to enter their emails addresses to enter a drawing for 1 of 16 $25.00 gift cards to an online vendor.

Data Analysis Plan

All statistical analyses were conducted in SPSS Version 19 (IBM Corp., 2010). Descriptive data were generated using the demographics survey, including age, gender, tribal affiliation, level of education, boarding school attendance, whether their primary caregiver attended boarding school, AI cultural participation, and whether they were encouraged by their primary caregiver to learn their culture.

Pearson Product Moment correlations were conducted to determine if there were any significant relationships between the AICI, EACI, and life satisfaction and coping styles. A series of three regressions were conducted among the traditional group to determine if coping styles mediates the relationship between AICI and satisfaction with life. The first regression that was conducted had AICI subscale predicting life satisfaction. The second regression that was conducted had the AICI predicting coping style. The third regression that was conducted had the AICI and coping styles predicting life satisfaction. Additionally, a series of ANOVAs were

conducted to determine if there are any significant differences between the traditional and assimilated groups on how they endorsed which coping styles they use. Post hoc Tukey tests were also conducted to determine which groups were significantly different. Lastly, a series of paired samples T tests were conducted after the traditional and assimilated groups samples sizes were matched to determine if there were any significant differences in coping between the groups.

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Results

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Sample Characteristics

The sample (n=104) consisted of adults who primarily identified as American Indian. There were 71 women and 31 men. Their ages ranged from 19 to 67 with a mean age of 37 years old. Their tribal affiliations included Lakota (n=37), Anishinaabe (n=25), Dakota (n=7), Pacific Northwest (n=10), Southern (e.g., Creek) (n=14), Southwest (e.g., Navajo; n=4), Apsaalooke (n=4), and Northeast (e.g., Seneca; n=2). The sample had an average life satisfaction of 26.24, which is in the "high range" indicating that the sample felt their lives, in general, were going well. Overall, the sample was largely female and highly educated. Table 1 displays the characteristics of the sample.

Table 1

Characteristic	$\underline{M}$	$\underline{SD}$	%
Age	37	11.33	
Gender			
Female			68.9%
Male			30.1%
Tribal Affiliation			
Lakota			35.8%
Anishinaabe			24.2%
Dakota			6.8%

Apsaalooke		3.8%
Pacific Northwest		9.7%
Southern		13.5%
Southwest		3.8%
Other		1.9%
Life Satisfaction	26.24	5.78
Education		
Less than high school		6.8%
High school		15.5%
Some college		24.3%
Associate degree		12.6%
Bachelor's degree		18.4%
Master's degree		20.4%
Doctoral degree		1.9%

The AIBI was used to categorize the sample into 1 of 4 groups, including traditional, assimilated, bicultural, and marginalized (see Figures 1 and 2). The groupings were determined by cut scores provided by McDonald, Ross, and Rose (2014), which included: traditional (AICI>40 and EACI<25); assimilated (AICI<41 and EACI>24); bicultural (AICI>40 and EACI<24); and marginalized (AICI>40 and EACI>24). A scatterplot of how the participants scored can be seen in Figure 2. The average AICI score was 40.7 and the average EACI score was 21.9.

The traditional group consisted of 11 males and 33 females. Their tribal affiliations included 17 Lakota, 8 Anishinaabe, 4 Dakota, 6 Pacific Northwest, 3 Southern, 2 Southwest, 3 Apsaalooke, and 1 Other. Their average age was 39.27 years old. Their average life satisfaction was 26.36 (high). Their average AICI and EACI scores were 46.18 and 18.95, respectively.

The assimilated group consisted of 5 males and 17 females. Their tribal affiliations included 4 Lakota, 7 Anishinaabe, 1 Dakota, 9 Southern, and 1 Southwest. Their average age was 38.27 years old. Their average life satisfaction was 27.59 (high). Their average AICI and EACI scores were 33.63 and 27.59, respectively.

The bicultural group consisted of 5 males and 6 females. Their tribal affiliations were 6 Lakota, 3 Anishinaabe, 1 Apsaalooke, and 1 Other. Their average age was 29.91 years old. Their average life satisfaction was 28. 36 (high). Their average AICI and EACI scores were 45.9 and 26.5, respectively.

The marginalized group consisted of 10 males and 11 females. Their tribal affiliations included 10 Lakota, 7 Anishinaabe, 2 Dakota, 4 Pacific Northwest, 2 Southern, and 1 Southwest. Their average age was 34.08 years old. Their average life satisfaction was 24. 88 (average). Their average AICI and EACI scores were 35.53 and 20.42, respectively.

Pearson Product-Moment Correlations

Bivariate correlations were conducted between cultural group, AICI, EACI, coping styles, and life satisfaction which can be found in Table 1. A number of significant correlations were found at the .05 and .001 levels. For the purposes of this study, the only correlations that were examined were those between life satisfaction, AICI, EACI, and coping styles. There were significant positive correlations between coping style and life satisfaction, including: (1) acceptance, striving, and reframing, (2) family support, (3) active coping, (4) emotional support, and (5) instrumental support. There were also significant negative correlations between life satisfaction and coping styles, including: (1) avoidance and detachment, (2) substance use, (3) behavioral disengagement, and (4) self-blame. Neither the AICI or the EACI subscales were significantly correlated with life satisfaction.

Mediation

In examining hypothesis 1, that is, among the traditional group, coping styles will mediate the relationship between AICI and life satisfaction, the mediation model variables were put into Hayes' (2018) PROCESS macro for SPSS. In step 1 of the mediation model, the

15

regression between the AICI and life satisfaction was not significant, $b = .34$, $t(42) = .34$, $p = .09$, indicating no relationship between AICI and life satisfaction. Given the lack of significance along the c' path, paths a and b were not examined.

Analysis of Variance (ANOVA)

Several one-way ANOVAs were conducted to examine if there were any significant differences between the four cultural identification groups on the two styles of coping (individualistic and collectivistic). The results showed several significant differences, including on (1) Religion [$F(3, 99) = 5.60$, $p = .001$] from the CCS, (2) Venting [$F(3, 99) = 2.85$, $p = .041$] from the BC, and (3) Planning [$F(3, 99) = 3.52$, $p = .018$] from the BC.

Regarding religion, a post hoc Tukey test indicated that the assimilated group ($M = 3.11$, $SD = 1.60$) was significantly different from the bicultural group ($M = 5.20$, $SD = .77$) and the bicultural group was significantly different from the marginalized group ($M = 3.27$, $SD = 1.68$). However, the traditional group ($M = 3.93$, $SD = 1.55$) was not significantly different from the other three groups on religion.

Regarding venting, a post hoc Tukey test indicated that the bicultural group ($M = 2.40$, $SD = .92$) was significantly different from the marginalized group ($M = 1.77$, $SD = .75$), but not the traditional group ($M = 1.90$, $SD = .76$), or the assimilated group ($M = 2.25$, $SD = .67$).

Regarding planning, a post hoc Tukey test indicated that the bicultural group ($M = 3.18$, $SD = .93$) was significantly different from the traditional ($M = 2.49$, $SD = .81$) and marginalized groups ($M = 2.25$, $SD = .76$), but not the assimilated group ($M = 2.52$, $SD = .75$).

Independent T tests

Given the unequal sample sizes of the traditional ($n = 44$) and assimilated ($n = 22$) groups, a random sample of 22 participants was taken from the traditional group to match the

assimilated sample. Afterwards, a series of Independent Samples T tests were conducted to determine if there any significant differences among the traditional and assimilated groups on the coping styles. The T tests indicated that there were no significant differences between the groups when it came to coping styles, which is congruent with the ANOVAs that were conducted.

Discussion

It was hypothesized that among traditional AIs, based on the orthogonal theory of biculturalism, coping style would mediate the relationship between American Indian cultural identification and life satisfaction. It was also hypothesized that traditional American Indians would engage in collectivistic coping styles significantly more than assimilated American Indians. Lastly, it was hypothesized that assimilated American Indians would engage in significantly more individualistic coping styles than traditional American Indians.

Regarding the first hypothesis, the lack of relationship between American Indian cultural identification and life satisfaction was somewhat unexpected given previous research that ties these two variables together (Dimitrova, Johnson, & van de Vijer, 2017; Schimmack, Radhakrishnan, Oishi, Dzokoto, & Ahadi, 2002). This might be explained by the assumption that, regardless of cultural identification as defined by the orthogonal theory of biculturalism (Oetting & Beauvais, 1990-1991), American Indian and European American cultures are more intertwined than they are thought to be, or possibly, American Indian culture is not as collectivistic as it is thought to be. Another possible explanation for the lack of relationship between these two mentioned variables is that previous studies did not use measures to differentiate cultures, but rather, used samples from entirely different countries.

Regarding hypotheses two and three, overall, there was not a significant difference between how the traditional and assimilated groups endorsed using either collectivistic, or

17

individualistic coping strategies. However, one significant difference was found between the bicultural and traditional groups on planning (individualistic coping) with the bicultural group engaging in planning significantly higher than the traditional group. Again, the lack of significant difference between the two groups on their coping styles may simply come down to traditional American Indian culture being more intertwined with European American culture than is assumed. Though there is a lack of significant difference between these groups on coping styles, both reported high levels of life satisfaction.

In sum, the hypotheses of this study were centered around examining if traditional American Indian culture provides some sort of unique buffering effects against stress via coping styles, but no conclusive evidence was found. Though the hypotheses were not supported, evidence of high levels of life satisfaction among traditional Americans Indians was found to be roughly equal to that of their assimilated peers, which is good information to know. Some limitations of this study are likely to have influenced the outcomes, including a relatively small overall sample size, unequal comparison groups (e.g., traditional vs. assimilated vs. bicultural vs. marginalized), and measures that may not have been adequate for the sample (e.g., the CCS was normed on an Asian sample).

APPENDIX B

FIGURES AND TABLES

High AICI

Traditional

Bicultural

Low
EACI

High
EACI

Marginal
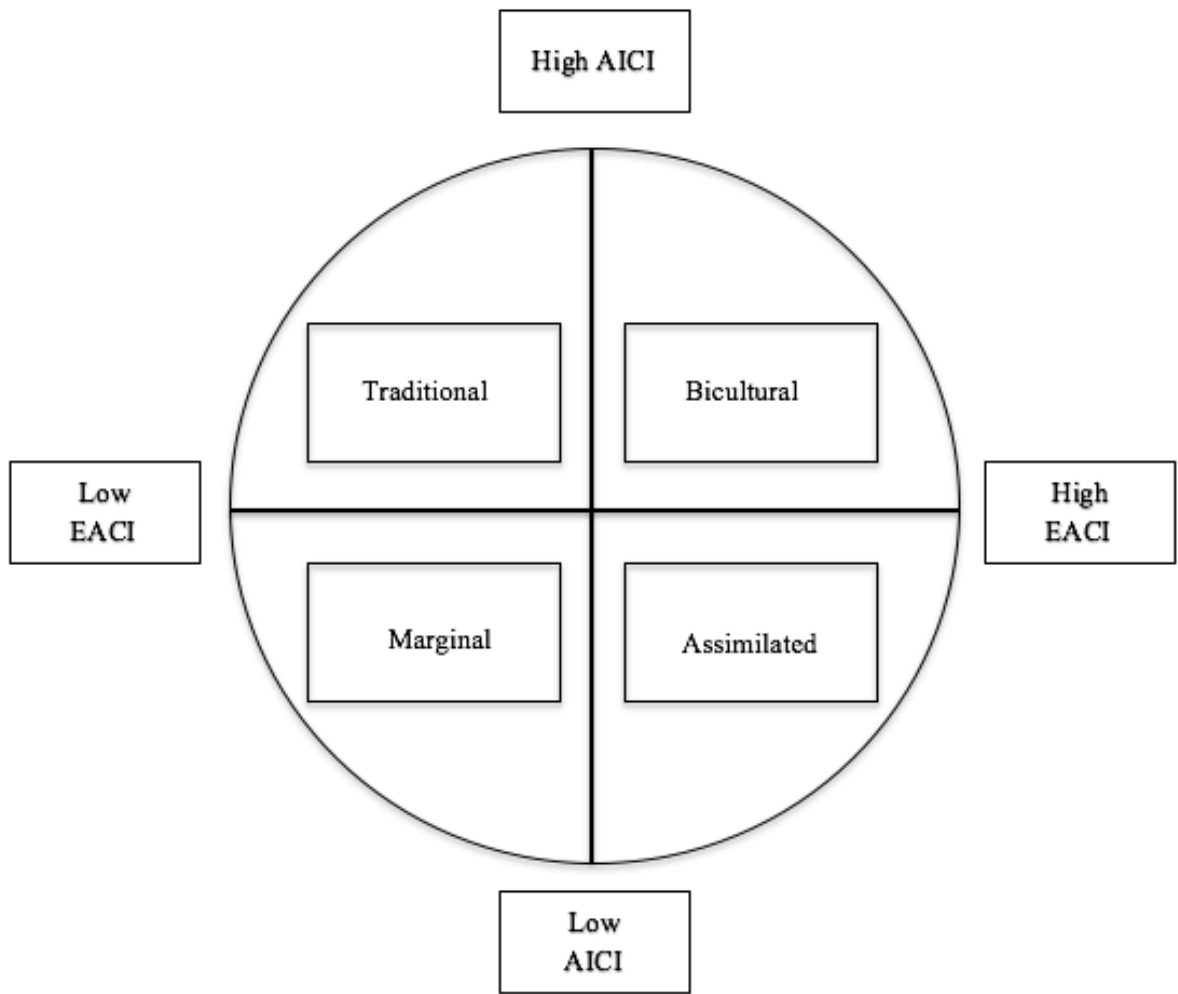
Assimilated

Low
AICI

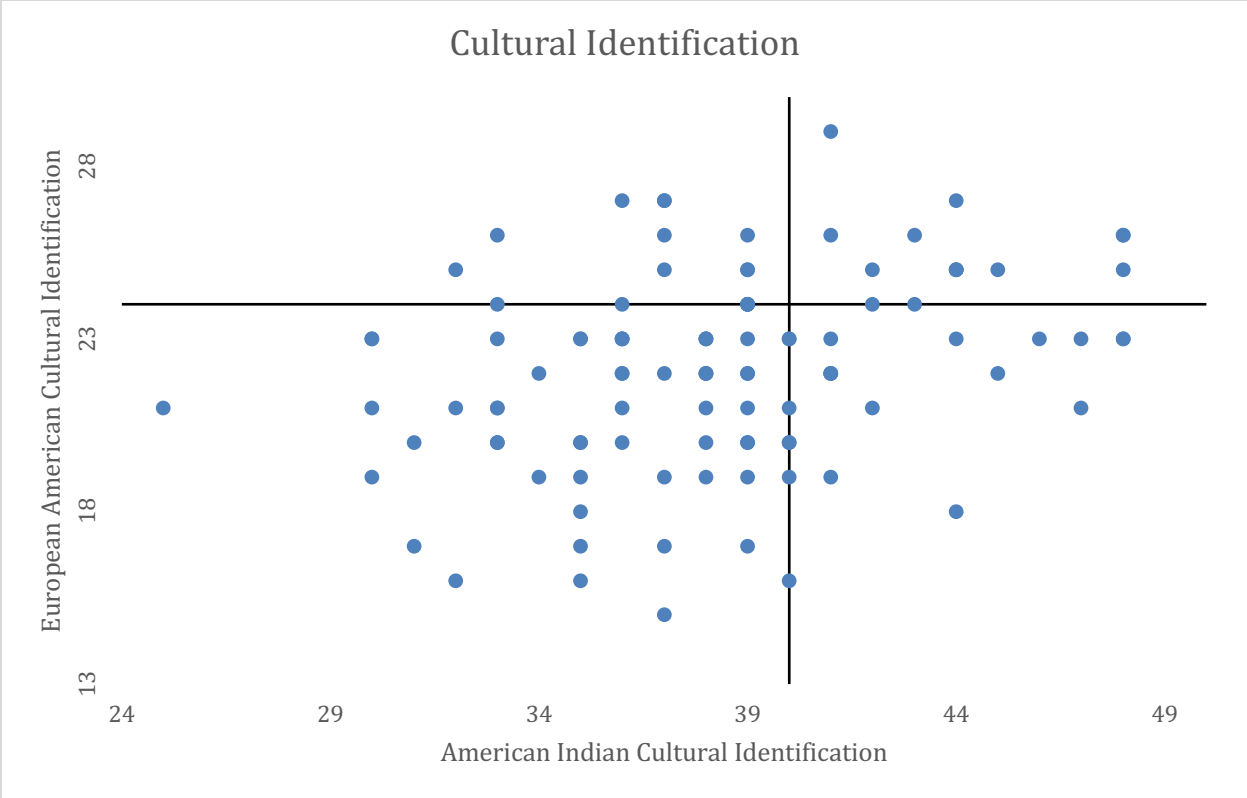**Figure 1.** Orthogonal Theory of Biculturalism (Oetting & Beauvais, 1990-1991)

Figure 2. AIBI subscales scatterplot for entire sample (N=104)

Q1 = Bicultural, Q2 = Traditional, Q3 = Marginalized, Q4 = Assimilated.

Table 2

	2	3	4	5	6	7	8
1. Tribe ID	-.065	-.075	.096	.087	-.068	-.079	.031
2. Life satisfaction	--	.178	.019	.319**	.359**	.145	-.290**
3. AICI		--	-.439**	.142	.197*	.444**	.016
4. EACI			--	.09	-.058	0	-.051
5. Acceptance, striving, & reframing				--	.377**	.341**	.086
6. Family support					--	.474**	-.412**
7. Religion						--	-.104
8. Avoidance and detachment							--
9. Private emotional outlets							
10. Self-distraction							
11. Active coping							
12. Denial							
13. Substance use							
14. Emotional support							
15. Instrumental support							
16. Behavioral disengagement							
17. Venting							
18. Positive reframing							
19. Planning							
20. Humor							
21. Acceptance							
22. Self-blame							

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 2 (cont.)

	9	10	11	12	13	14	15
1. Tribe ID	.076	.17	.111	.034	.045	-.031	.037
2. Life satisfaction	-.104	-.17	.237*	-.062	-.319**	.294**	.282**
3. AICI	.064	.085	.300**	.166	-.041	.064	.045
4. EACI	.072	-.08	.022	-.037	.033	.102	.143
5. Acceptance, striving, & reframing	.123	-.124	.438**	-.228*	-.153	.284**	.186
6. Family support	.04	-.135	.312**	-.17	-.244*	.488**	.491**
7. Religion	.124	-.042	.436**	.04	-.12	.178	.141
8. Avoidance and detachment	-.127	.189	-.123	.159	.203*	-.400**	-.501**
9. Private emotional outlets	--	.043	.074	.148	.011	.191	.242*
10. Self-distraction		--	.042	.136	.118	-.05	.045
11. Active coping			--	-.14	-.099	.400**	.415**
12. Denial				--	.231*	-.149	-.175
13. Substance use					--	-.102	-.222*
14. Emotional support						--	.729**
15. Instrumental support							--
16. Behavioral disengagement							
17. Venting							
18. Positive reframing							
19. Planning							
20. Humor							
21. Acceptance							
22. Self-blame							

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 2 (cont.)

	16	17	18	19	20	21	22
1. Tribe ID	.042	-.026	.091	-.002	.076	.178	-.076
2. Life satisfaction	-.200*	-.079	.091	.133	.016	.025	-.264**
3. AICI	-.106	-.016	-.001	.105	-.07	.038	-.054
4. EACI	.001	.354**	.055	.114	-.101	.005	.134
5. Acceptance, striving, & reframing	-.164	.131	.474**	.340**	-.072	.313**	-.104
6. Family support	-.258**	.220*	.16	.239*	.115	.06	-.129
7. Religion	-.178	.115	.288**	.286**	.05	.068	.007
8. Avoidance and detachment	.385**	-.233*	.06	-.1	-.086	.123	.261**
9. Private emotional outlets	.105	.139	-.012	.296**	-.176	-.026	.224*
10. Self-distraction	.209*	.092	.068	.122	.291**	.195*	.255**
11. Active coping	-.394**	.359**	.437**	.366**	.066	.257**	-.062
12. Denial	.463**	.037	-.048	.098	-.033	-.189	.16
13. Substance use	.177	.078	-.038	.023	-.036	.091	.173
14. Emotional support	-.162	.437**	.185	.366**	.164	.218*	-.025
15. Instrumental support	-.231*	.483**	.209*	.381**	.248*	.191	-.007
16. Behavioral disengagement	--	-.176	-.11	-.082	.088	-.023	.223*
17. Venting		--	.202*	.378**	.115	0	.139
18. Positive reframing			--	.430**	.217*	.395**	-.055
19. Planning				--	.102	.248*	.258**
20. Humor					--	.249*	-.048
21. Acceptance						--	.048
22. Self-blame							--

** Correlation is significant at the 0.01 level
(2-tailed).
* Correlation is significant at the 0.05 level
(2-tailed).

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