

# THE RELATIONSHIP OF SELF-COMPASSION AND SUICIDE RISK FACTORS IN AMERICAN INDIAN/ALASKA NATIVE PEOPLE

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*Abstract: In this study, positive aspects of self-compassion (i.e., self-kindness, common humanity, and mindfulness of one's thoughts and feelings) were explored in relation with suicide risk factors (i.e., perceived burdensomeness and thwarted belongingness) in a community sample of 242 self-identified American Indian/Alaska Native (AI/AN) adults. Participants completed a survey packet including a demographic form, the Interpersonal Needs Questionnaire, and the Self-Compassion Scale at several Indian Health Service clinics and tribal centers in the Great Plains of the United States. Results indicated that positive aspects of self-compassion (i.e., self-kindness, common humanity, and mindfulness) were associated with and predictive of less suicide risk (i.e., less perceived burdensomeness and thwarted belongingness) among AI/AN adults. Of those with a history of suicidal ideation ( $n = 89$ ), positive aspects of self-compassion were predictive of less perceived burdensomeness, but were not predictive of thwarted belongingness. Implications for prevention and intervention programs that emphasize self-compassion, mindfulness, and culturally relevant practices, as well as mental health advocacy, including suicide prevention, for AI/AN people are highlighted.*

## INTRODUCTION

### Suicide Risk Among American Indian/Alaska Native People

In 2018, the Centers for Disease Control and Prevention (CDC; 2020) reported suicide as the second leading cause of death for American Indian/Alaska Native (AI/AN) people between the ages of 10 to 34. Since 2003, AI/AN people have the highest suicide rates compared to other ethnocultural groups, which have been steadily increasing over time (Leavitt et al., 2018; O'Keefe et al., 2014). When looking at the AI/AN population as a whole, suicide remains one of the top 10 leading causes of death (CDC, 2019). Some of the risk factors that increase AI/AN people's suicide risk include, but are not limited to, traumatic experiences, hopelessness, lack of support, mental

health concerns, family violence, impulsivity, suicide attempt history, and access to lethal means (Gray & McCullagh, 2014). Historical and intergenerational trauma is a specific risk factor for suicide among AI/AN people as these traumas are embedded in families and communities and passed down to future generations (FitzGerald et al., 2017; Gray & McCullagh, 2014).

### **Interpersonal Psychological Theory of Suicide**

One theory of suicidal risk and behaviors is Joiner's Interpersonal Psychological Theory of Suicidal Behavior (IPTs). IPTs draws on several components to explain why people may be at risk for death by suicide and ultimately why people die by suicide, including thwarted belongingness, perceived burdensomeness, and acquired capability (Joiner, 2005; Van Orden et al., 2010).

Thwarted belongingness refers to the mental suffering that occurs as a result of a lack of connectedness with others. Human beings are born to be relational and desire to feel connected, and when this does not occur, it results in loneliness and increases thwarted belongingness (Joiner, 2005).

Perceived burdensomeness is the extent to which people believe they are a burden to those who play an important role in their lives (i.e., family, friends, community, etc.). Therefore, the greater the sense of being a burden on others (regardless of whether or not others view the person as a burden), the greater the suicide risk. The combination of perceived burdensomeness and thwarted belongingness are theorized to be risk factors for suicide and death by suicide for people in general (Joiner, 2005; O'Keefe et al., 2014; Van Orden et al., 2010).

Acquired capability refers to an individual's ability to follow through with the actual act of suicide (Van Orden et al., 2010). The actual act of suicide can be a fearful and painful event. Human beings are not innately designed to follow through with such an act (Joiner, 2005). So, the way people develop the acquired capability to carry out the act of suicide is through repeated exposure to painful events (e.g., experiencing traumatic events, being bullied). While there is merit in studying acquired capability, many researchers in the field of suicidality tend to focus on thwarted belongingness and perceived burdensomeness as suicide risk factors (Brailovskaia et al., 2020; El et al., 2018; Martin et al., 2018; McClay et al., 2020; O'Keefe, 2014; Roeder & Cole, 2018). Therefore, thwarted belongingness and perceived burdensomeness will be the aspects of suicide risk explored in the present study.

**Thwarted Belongingness and Perceived Burdensomeness as Suicide Risk Factors for AI/AN People**

O’Keefe and colleagues (2014) were the first group of researchers to explore the linear relationships of demographics (i.e., gender, age, and family income) and levels of depression, thwarted belongingness, and/or perceived burdensomeness with suicidal ideation in a sample of 171 AI/AN college students from three midwestern campuses, ranging in age from 18 to 62, and representing 27 different tribes/nations. They found that perceived burdensomeness significantly predicted suicidal ideation for these AI/AN college students, more than what demographics and levels of depression explained, and that the interaction between thwarted belongingness and perceived burdensomeness significantly predicted AI/AN college students’ suicidal ideation beyond what depression levels and demographics explained. However, thwarted belongingness did not significantly predict suicidal ideation beyond what was accounted for by participant demographics and levels of depression in their AI/AN college student sample (O’Keefe et al., 2014).

Despite this finding, thwarted belongingness appears to be a relevant construct for AI/AN people given that a sense of belonging is important in AI/AN youth, families, clans, and tribal communities given the importance of relational ways (Chacko & Menon, 2013; Krmpotich et al., 2016). Connectedness to family, including extended family, has been identified as a protective factor against suicidality for AI/AN adolescents (Goldston et al., 2008). AI/AN people often identify with their tribal community including participating in cultural events, spiritual guidance, and/or engaging with tribal leaders and members. In one study, AI/AN people who were separated from their tribal communities, either due to distance or lack of tribal involvement, were found to have an increased risk for thwarted belongingness (Rhoades-Kerswill, 2012). In another study, Hill (2009) explored belongingness in relation to suicidality among AI/AN people and found that more disconnection (i.e., higher thwarted belongingness) was associated with a greater risk for suicidal ideation. Other researchers have noted the connection to family members as well as their tribal community as a protective factor against suicidal thoughts, attempts, and completions among AI/AN people (Alcántara & Gone 2007; Henson et al., 2017). Alcántara and Gone (2007) found that family and tribal connectedness, as well as commitment to cultural spirituality, interpersonal communication skills, cultural continuity, and the presence of nurses (in clinic or school settings) were buffers against suicidality for AI/AN people. In reviewing the literature, Henson et al. (2017) found that family connectedness (i.e., experiencing affection and close relationships with parents)

and non-familial connectedness (i.e., caring relationships with school officials, religious leaders, and tribal leaders) were protective factors for AI/AN adolescents related to suicidality. Therefore, furthering these research efforts in understanding the relationship between thwarted belongingness and suicidal ideation in AI/AN adults in community settings is warranted.

Perceived burdensomeness is another potential risk factor for suicidality among AI/AN people. If someone feels like a burden to their family, given the importance of connectedness and closeness of family relationships in AI/AN communities, it is possible that AI/AN individuals may be at risk for depression and possibly suicidal risk in combination with other factors. According to Rhoades-Kerswill (2012), perceived burdensomeness for AI/AN people might increase when they believe that they are not fulfilling their traditional roles, which could create a sense of burdensomeness on their community and/or family. There are only a few research findings suggesting that AI/AN people have an increased risk for suicidal thoughts and behaviors when they feel like a burden to others (O'Keefe et al., 2014; Rhoades-Kerswill, 2012; Olson et al., 2011). Given that perceived burdensomeness is an important component identified in the IPTS that may enhance one's desire to die by suicide, further research on perceived burdensomeness among AI/AN people is needed.

### **Positive Aspects of Self-Compassion as Potential Protective Factors for Suicide Risk Among AI/AN People**

Knowing that AI/AN people have an increased rate of suicidal risk and behaviors, including death by suicide, compared to other ethnocultural groups, it is also important to research the protective factors related to suicidality within AI/AN cultures. Self-compassion is a positive psychology construct, and to the best of our knowledge, it has not been explored in AI/AN communities and may indeed be a protective factor against suicidality in AI/AN adults in community settings.

Self-compassion refers to the ability to have empathy toward oneself and one's suffering (Neff, 2003), which has been known to increase positive emotional states while reducing depression and anxiety (Neff & Vonk, 2009). Neff (2003) identified three theoretical dimensions of self-compassion including self-beliefs, relational beliefs, and the relationship to one's own thoughts and feelings. The three positive aspects of self-compassion are self-kindness, common humanity, and mindfulness.

Self-kindness refers to how kind an individual is to oneself while refraining from judging oneself. Common humanity involves embracing imperfection as a shared human experience. Mindfulness of one's thoughts and feelings is the ability to equalize experiences, that is, to experience one's thoughts and feelings in the moment, instead of amplifying individual suffering (Akin & Akin, 2015; Neff, 2003).

A self-compassionate mindset is created when all three positive self-compassion (i.e., self-kindness, common humanity, and mindfulness of one's thoughts and feelings) components blend together and reciprocally interact (Neff & McGehee, 2010). If self-compassion is linked with connectedness, happiness, and optimism (Neff & McGehee, 2010), then it is likely that an increase in self-compassion could potentially avert and/or decrease suicidal thoughts.

Of interest, only four studies to date have explored self-compassion as a protective factor against suicidality in the general population. In two studies, lower levels of self-compassion were associated with higher rates of suicide plans (i.e., particularly self-kindness and common humanity; Ali, 2014) and/or suicide attempts for children and adolescents (Tanaka et al., 2011). Self-compassion was also found to be directly and inversely related to suicidal behavior and depressive symptoms among college students (Rabon et al., 2018). Lastly, Rabon and colleagues (2019) explored the relationship between self-compassion and suicidal behavior in a sample of 541 United States veterans and found a significant inverse relationship between self-compassion and suicidal behavior among veterans, which was strengthened as the level of suicide risk severity increased.

No researchers to date have explored the relationship of self-compassion and suicide risk factors among AI/AN people, demonstrating the need for the present study. Current research has focused on identifying protective factors within AI/AN families and tribal communities (Alcántara & Gone 2007; Gilligan, 2002; Goldston et al., 2008; Henson et al., 2017; Hill, 2009; Rhoades-Kerswill, 2012). Understanding the relationship of self-compassion with suicide risk factors, such as thwarted belongings and perceived burdensomeness, may provide a new perspective in identifying internal/psychological protective factors related to suicidality among AI/AN people. Protective factors related to suicide risk tend to be understudied and receive less attention in research studies in general (FitzGerald et al., 2017). Identifying and increasing protective factors may be more effective than interventions aimed to reduce suicide risk factors (FitzGerald et al., 2017; Freedenthal & Stiffman, 2004).

The purpose of the present study was to explore the relationship of the three self-compassion dimensions with suicide risk factors of thwarted belongingness and perceived

burdensomeness in a sample of AI/AN people. The research questions for this study were: 1) What is the linear relationship of self-compassion dimensions with perceived burdensomeness among AI/AN adults? and 2) What is the linear relationship of self-compassion dimensions with thwarted belongingness among AI/AN adults? It was hypothesized that the self-compassion dimensions of self-kindness, common humanity, and mindfulness of one's thoughts and feelings would be significantly and inversely correlated with and predictive of 1) perceived burdensomeness and 2) thwarted belongingness among AI/AN people.

## METHODS

### Participants

The sample consisted of 242 self-identified AI/AN adults (83 men and 159 women) who came to one of several Indian Health Service (IHS) and/or tribal centers in the Great Plains of the United States. To respect participants' anonymity, as well as tribal approvals and university IRB processes and procedures, specific tribal affiliations of participants will not be reported. See Table 1 for the demographics of the sample.

The participants identified the presenting issues that brought them to the centers/clinics (often checking more than one box); the most common of which were depression (44.2%), anxiety (41.3%), financial stress (40.9%), high blood pressure (30.6%), relationship issues (28.1%), diabetes (26%), and employment (24%). In terms of level of social support, participants reported, on average, having four close friends ( $M = 4.08$ ,  $SD = 1.92$ ).

In terms of suicidality, 62.9% ( $n = 151$ ) of the participants did not have a history of suicidal ideation whereas 37.1% ( $n = 89$ ) of the participants reported a history of suicidal ideation. The majority of the participants reported no history of suicide attempts (81.3%,  $n = 196$ ), but 18.7% ( $n = 45$ ) of the participants did identify a history of attempting suicide (of whom 71.1% had attempted once or twice and 28.9% reported three or four attempts).

### Procedure

Tribal research and university IRB approvals were obtained prior to the start of this study. AI/AN adults who visited their IHS and/or tribal centers were recruited via flyers that were posted at their center or recruited by their behavioral health care providers and/or the front desk staff at the centers. They were invited to participate in the study and informed that their participation was

voluntary and that their decision whether or not to participate did not influence any services received at the centers.

If participants stated an interest in this research study, they were given an envelope, which included the informed consent form, the demographic questionnaire, the Interpersonal Needs Questionnaire, the Self-Compassion Scale, and a resource page. The participants did not write their names on any survey forms, so there was no way to connect their survey responses with their identities. The participants sealed the envelope after completing the survey and dropped it off to the front desk staff at the center, who put the envelope in a locked file cabinet. Participants received \$5 upon completion of the survey by the staff at the center/clinic.

## **Measures**

### ***Demographic Page***

On the first page of the survey, participants completed questions related to their demographics including their age, gender, race, tribal membership, marital status, current living arrangements, past living arrangements, highest level of education completed, annual family income, spiritual preference, previous suicidal ideation and/or attempts, number of close friends, and type(s) of current presenting concerns.

### ***Interpersonal Needs Questionnaire***

The Interpersonal Needs Questionnaire (INQ; Van Orden et al., 2012) is a 15-item self-report measure of thwarted belongingness and perceived burdensomeness, which are two of the three key constructs derived from Joiner's Interpersonal Psychological Theory of Suicidal Behavior (IPTS; 2005), which proposes that for an individual to develop the desire for suicidal intent, they must possess thwarted belongingness and perceived burdensomeness, which refer to specific types of disconnections in their interpersonal relationships. The first six items on the INQ measure perceived burdensomeness (e.g., "These days, the people in my life would be better off if I were gone"). The last nine questions on the INQ measure thwarted belongingness (e.g., "These days, I feel disconnected from other people"). Participants read each item and responded using a 7-point Likert scale (1 = not at all true for me to 7 = very true for me). Items 7, 8, 10, 13, 14, and 15 of the INQ are reverse scored. Higher scores on these two subscales indicate more difficulties related to perceived burdensomeness and thwarted belongingness. The psychometric properties of this instrument are well-established in terms of internal consistency reliability, construct validity, and convergent validity (Van Orden et al., 2012). The internal consistency reliability estimates



(Cronbach alpha's) for the INQ subscales were .93 for perceived burdensomeness and .88 for thwarted belongingness for the current AI/AN adult sample. The INQ has been identified as a reliable and valid measure and used in several AI/AN studies (e.g., O'Keefe et al., 2014)

### ***Self-Compassion Scale***

The Self-Compassion Scale (SCS; Neff, 2003) is a 26-item self-report measure of self-compassion. The positive subscales of SCS were included in this study: self-kindness (e.g., "I try to be loving towards myself when I'm feeling emotional pain"), common humanity (e.g., "When things are going badly for me, I see the difficulties as part of life that everyone goes through"), and mindfulness (e.g., "When something upsets me, I try to keep my emotions in balance"). Participants rated each item, using a 5-point Likert scale (1 = almost never to 5 = almost always). For the current AI/AN sample, the internal consistency reliability estimates (Cronbach alpha's) for the self-compassion subscales were as follows: .83 for self-kindness, .73 for common humanity, and .78 for mindfulness. The psychometric properties of the SCS are established as being a reliable and valid measure of self-compassion (Neff, 2003), and this is the first study to use the SCS with AI/AN participants.

**Table 1**  
***Demographics of the Sample (n = 242)***

<b>Variable Name</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Male	81	34.3
Female	155	65.7
<b>Race</b>		
American Indian/Alaska Native (AI/AN)	188	77.7
AI/AN and White	38	15.7
AI/AN and Hispanic/Latinx	9	3.7
AI/AN and Black	4	1.7
AI/AN, Hispanic/Latinx, and White	2	.8
AI/AN, Black, and White	1	.4
<b>Age</b>		
19-24	22	9.1
25-30	30	12.4
31-35	27	11.2
36-40	25	10.3
41-45	32	13.2
46-50	26	10.7
51-55	26	10.7
56-60	24	9.9
61-65	14	5.8
66-70	7	2.9
71-75	4	1.7
76-80	5	2.1

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Table 1 continued  
*Demographics of the Sample (n = 242)*

Variable Name	Frequency (n)	Percentage (%)
<b>Marital Status</b>		
Never Been Married	99	40.9
Married	75	31
Divorced	51	21.1
Widowed	17	7
<b>Highest Education</b>		
Junior High	9	3.7
Some High School	31	12.8
High School/GED	59	24.4
Vo-Tech	10	4.1
Some College	80	33.1
Undergraduate Degree	25	10.3
Some Graduate College	6	2.5
Graduate Degree	20	8.3
Other	2	.8
<b>Current Living Arrangement (Check all that apply)</b>		
Reservation	5	2.1
Rural	46	19
Tribal Housing	28	11.6
Urban	141	58.3
Other	39	16.1
<b>Past Living Arrangement (Check all that apply)</b>		
Reservation	47	19.4
Rural	55	22.7
Boarding School	24	9.9
Tribal Housing	35	14.5
Urban	144	59.5
Other	28	11.6
<b>Spiritual Preference</b>		
Native American Church	70	28.9
Methodist	10	4.1
Catholic	27	11.2
Baptist	12	5
Lutheran	15	6.2
Other	78	32.2
None	45	18.6
<b>Annual Income</b>		
< 10,000	76	31.4
10,001 to 20,000	41	16.9
20,001 to 30,000	53	21.9
30,001 to 40,000	13	5.5
40,001 to 50,000	26	11
50,001 to 60,000	4	1.7
60,001 to 70,000	9	3.8
70,001 to 80,000	3	1.3
80,001 to 90,000	5	2.1
> 90,001	6	2.5

## RESULTS

Inspection of the descriptive statistics for the main study variables revealed that, on average, this sample of AI/AN people experienced mild to moderate levels of self-compassion and thwarted belongingness, with some variation in scores, and on average, mild levels of perceived burdensomeness, with less variation in scores. See Table 2 for the descriptive statistics for the main study variables.

Preliminary analyses were conducted to see how demographic variables might relate to the outcome variables of the study. T-tests were conducted to explore potential demographic group differences (categorical) in the outcome variables of perceived burdensomeness and thwarted belongingness. Pearson correlational analyses were conducted to explore the relationship of the demographic variables (continuous) with the outcome variables of perceived burdensomeness and thwarted belongingness.

**Table 2**  
***Means and Standard Deviations for Main Study Variables for this AI/AN Sample (n = 242)***

<b>Variable Name</b>	<b>Mean</b>	<b>SD</b>	<b>Actual Range</b>
Perceived burdensomeness	9.74	6.64	6-36
Thwarted belongingness	24.67	12.62	9-63
Self-kindness	15.99	4.74	5-25
Common humanity	13.58	3.54	4-20
Mindfulness of thoughts/feelings	13.90	3.71	4-20

There were no gender differences in perceived burdensomeness,  $t(240) = 1.66, p > .05$ . However, there were gender differences in thwarted belongingness,  $t(240) = 2.45, p < .05$ . AI/AN men ( $M = 27.39, SD = 14.29$ ) reported more thwarted belongingness compared to AI/AN women ( $M = 23.25, SD = 11.44$ ).

Age was not significantly related to perceived burdensomeness ( $r = -.11, p > .05$ ) or thwarted belongingness ( $r = -.08, p > .05$ ). Educational level was also not significantly correlated with perceived burdensomeness ( $r = -.11, p > .05$ ) or thwarted belongingness ( $r = -.11, p > .05$ ).

Annual family income was significantly and inversely related to perceived burdensomeness ( $r = -.16, p < .05$ ) and thwarted belongingness ( $r = -.18, p < .01$ ). Higher levels of annual family income were associated with lower levels of perceived burdensomeness and thwarted belongingness for the AI/AN adults in this study.

Based on these preliminary findings, annual family income was statistically controlled for in the multiple regression analysis for perceived burdensomeness, and gender and annual family income were statistically controlled for in the multiple regression analysis for thwarted belongingness.

### Correlation Analyses

Pearson correlational analyses were conducted to explore the bivariate relationships between and among the self-compassion subscales, perceived burdensomeness and thwarted belongingness. See Table 3 for the correlation matrix for the main study variables.

A statistically significant positive relationship was found between perceived burdensomeness and thwarted belongingness ( $r = .58, p < .001$ ). More of a sense of belonging was associated with less perceived burdensomeness.

The positive aspects of self-compassion were significantly and inversely related to perceived burdensomeness, including self-kindness ( $r = -.27, p < .001$ ), common humanity ( $r = -.10, p < .001$ ), and mindfulness of one's thoughts and feelings ( $r = -.22, p = .001$ ). The positive aspects of self-compassion were significantly and inversely related to thwarted belongingness, including self-kindness ( $r = -.44, p < .001$ ), common humanity ( $r = -.31, p < .001$ ), and mindfulness ( $r = -.40, p < .001$ ). Thus, being kind to oneself, feeling more connected to the common conditions of humanity, and being more mindful of one's thoughts and feelings were associated with feeling less of a burden to others and fewer struggles in belongingness in interpersonal relationships.

**Table 3**  
***Correlation Matrix for Perceived Burdensomeness, Thwarted Belongingness, and Self-Compassion Subscales for the AI/AN sample (n = 236)***

	PB	TB	SK	CH	M
PB	1	.58**	-.27**	-.10	-.22**
TB		1	-.44**	-.31**	-.40**
SK			1	.58**	.73**
CH				1	.64**
M					1

\* =  $p < .05$ ; \*\* =  $p < .01$

PB = Perceived Burdensomeness; TB = Thwarted Belongingness; SK = Self-Kindness; CH = Common Humanity; M = Mindfulness

## Multiple Regression Analyses

Two separate multiple regression analyses were conducted to explore the relationship of the self-compassion scales with 1) perceived burdensomeness and 2) thwarted belongingness.

In the first multiple regression analysis for perceived burdensomeness, annual family income was entered into the first block of the analysis, and then the three positive self-compassion subscales (i.e., self-kindness, common humanity, and mindfulness of one's thoughts and feelings) were entered into the second block. In the first model, annual family income significantly entered the equation and accounted for 2.6% variance in perceived burdensomeness scores,  $F(1, 234) = 6.13, p < .05$ . In the second model, the three positive self-compassion subscales were added to the equation, accounting for an additional 8.2% of the variance in perceived burdensomeness scores,  $F(4, 231) = 16.99, p < .001$ . Examination of the standardized beta weights (for model 2) revealed that self-kindness ( $\beta = -.29, t = -3.16, p < .01$ ) and annual family income ( $\beta = -.17, t = -2.75, p < .001$ ) were the significant individual predictors of perceived burdensomeness. See Table 4.

**Table 4**  
***Multiple Regression Findings for Self-kindness, Common Humanity, and Mindfulness as Predictors of Perceived Burdensomeness While Controlling Annual Income***

	<b>R</b>	<b>R<sup>2</sup></b>	<b>F</b>	<b><math>\beta</math></b>
<b>Model 1</b>				
<b>Predictor Variable(s)</b>				
Annual Income	.160	.026	6.13*	
<b>Model 2</b>				
<b>Predictor Variable(s)</b>				
	.329	.108	6.99**	
Annual Income				-.17**
Self-kindness				-.29**
Common Humanity				.10
Mindfulness				-.06

\* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$ ;  $R^2$  = R-Squared;  $\beta$  = Standardized Beta Weight

In the multiple regression analysis for thwarted belongingness, gender and annual family income were entered into the first block of the analysis. In this first model, gender and annual family income significantly entered the equation and accounted for 5.6% in thwarted belongingness,  $F(2, 233) = 6.96, p = .001$ . In the second model, the three positive self-compassion subscales were added to the equation, accounting for an additional 20.3% of the variance in

thwarted belongingness scores,  $F(5, 230) = 16.10, p < .001$ . Examination of the standardized beta weights for model 2 revealed that self-kindness ( $\beta = -.33, t = -3.89, p < .001$ ), annual family income, ( $\beta = -.19, t = -3.24, p < .001$ ), and gender ( $\beta = -.18, t = -3.21, p < .01$ ) were the significant individual predictors of thwarted belongingness. In summary, self-kindness was the strongest individual predictor of perceived burdensomeness and thwarted belongingness for this AI/AN sample. See Table 5.

**Table 5**  
***Multiple Regression Findings for Self-kindness, Common Humanity, and Mindfulness as Predictors of Thwarted Belongingness While Controlling for Gender and Annual Income***

	<b>R</b>	<b>R<sup>2</sup></b>	<b>F</b>	<b>β</b>
<b>Model 1</b>				
<b>Predictor Variable(s)</b>				
	.237	.056	6.96***	
Gender				
Annual Income				
<b>Model 2</b>				
<b>Predictor Variable(s)</b>				
	.509	.269	16.10***	
Gender				-.18**
Annual Income				-.19**
Self-kindness				-.33***
Common Humanity				-.03
Mindfulness				-.13

\* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$ ; R<sup>2</sup> = R-Squared; β = Standardized Beta Weight

### Post-hoc analyses

For participants who reported a history of suicidal ideation ( $n = 89$ ), the three positive aspects of self-compassion, when considered together, accounted for 19.9% in perceived burdensomeness scores,  $F(3, 85) = 7.03, p < .001$ . However, for these same participants, the three positive aspects of self-compassion did not significantly predict struggles with belongingness in relationships with others,  $F(3, 85) = 1.18, p > .05$ . Therefore, for those AI/AN people with a history of suicidal ideation in this sample, being more self-compassionate in general was predictive of feeling less of a burden to others, but not predictive of thwarted belongingness.

## DISCUSSION

The purpose of this study was to explore the positive aspects of self-compassion in relation to two interpersonal components of suicide risk—perceived burdensomeness and thwarted belongingness among AI/AN adults.

As hypothesized, the positive aspects of self-compassion, including self-kindness, common humanity, and mindfulness of one's thoughts and feelings, were significantly and inversely related to perceived burdensomeness and thwarted belongingness for AI/AN adults. Few researchers have specifically focused on perceived burdensomeness and thwarted belongingness among AI/AN people, yet Hill (2009) recognized the unique dimensions of belongingness, which included the psychological, sociological, physical, and spiritual connections of individuals, families, and communities within the AI/AN population. However, no researchers to date have explored the self-compassion experiences of AI/AN people in relation to these variables.

In the current study, self-kindness was the most significant individual predictor of perceived burdensomeness and thwarted belongingness in this sample of AI/AN people. Therefore, those who more kind to themselves tended to struggle less with belongingness, which is in line with Neff and McGehee's (2010) findings that self-compassion was a significant predictor of connectedness among adolescents. In previous research, self-compassion has been associated with emotional regulation (see Vettese et al., 2011). Therefore, self-compassion could serve as a buffer against negative thoughts such as thwarted belongingness or other unwanted feelings.

While this is the first study of its kind to explore how self-compassion is a protective factor related to perceived burdensomeness and thwarted belongingness among AI/AN adults, these findings are in line with the Ali (2014) findings with a predominantly White adolescent sample in that higher levels of self-compassion were associated with lower levels of suicidality.

Annual family income was found to be a significant predictor of perceived burdensomeness and thwarted belongingness, but only accounted for a small portion of the variance in comparison to self-compassion. Having more financial resources was associated with more belongingness and feeling less of a burden to others. Thus, the relationship between financial well-being and suicide risk factors among AI/AN people should not be underestimated.

Age was not related to perceived burdensomeness and thwarted belongingness, which is a unique finding in the suicidality literature in general. However, age as a variable, was not the focus of this study.

There were no gender differences in perceived burdensomeness. However, gender was a significant individual predictor of thwarted belongingness. AI/AN men, on average, reported more thwarted belongingness than women. More research is needed to understand potential gender differences in suicide risk for AI/AN people, including relevant protective factors such as self-compassion. FitzGerald et al. (2017) found gender differences in protective factors related to suicidality (i.e., attempts) for AI/AN youth. Positive relationships in the home, school, and community were significant protective factors for girls, and positive relationships with adults in the home was the protective factor for boys.

The post-hoc findings of the current study revealed that the three positive aspects of self-compassion were significant predictors of perceived burdensomeness for AI/AN people who reported a history of suicidal ideation ( $n = 87$ ), but were not for thwarted belongingness. These findings provide some support for one previous research study in which researchers found that perceived burdensomeness was related to suicidal ideation among AI/AN college students (O’Keefe et al., 2014).

### **Implications for Counseling Practice and Prevention Programs with AI/AN Adults**

The results from this study indicate that the positive aspects of self-compassion, in particular, self-kindness, common humanity, and mindfulness of one’s thoughts and feelings, were significantly and inversely related to and predictive of feelings of perceived burdensomeness and thwarted belongingness for AI/AN adults, and thus, self-compassion appears to be a protective factor for AI/AN adults. Given that positive aspects of self-compassion explained more than 8% of the variance in perceived burdensomeness and over 20% of the variance in thwarted belongingness among AI/AN adults seeking Indian Health Services and/or tribal center services, more self-compassionate and mindfulness-based interventions should be incorporated into health and wellness programs as well as culturally relevant evidence-based counseling and psychotherapy support to AI/AN adults.

Potential thoughts of burdening others may be a relevant issue for AI/AN people in that families are often extended, and connections to tribal communities can be as strong as the traditional immediate family. Rhoades-Kerswill (2012) theorized that perceived burdensomeness among AI/AN people might become more evident when they are not fulfilling their traditional roles, which could result in feeling like a burden on their families and /or communities.



Mental health professionals can assess their AI/AN clients' families, clans, and tribal/nation histories, along with creating family genograms, to explore family relationships as well as relational dynamics to provide insight as to significant and meaningful family and tribal connections in their lives. AI/AN adults may benefit from narrative storytelling to express their cultural experiences and traditions and how AI/AN adults view themselves, and their people, including their experiences of self-compassion and cultural resilience. Being kind to oneself, feeling that one's experiences are part of the human condition, and being aware of one's thoughts and feelings in a balanced, nonjudgmental way may be protective in combating interpersonal aspects of suicidality, which may have been passed down from generations of historical cultural oppression.

Mindfulness is an important technique that mental health professionals could incorporate into their sessions with AI/AN adults who feel like a burden to others and/or feel as though they do not belong. Teaching AI/AN clients how to relate to their internal experiences without judging or overanalyzing them is essential for well-being and hope, given the findings of this study. Learning stress-reduction and mindfulness techniques will help AI/AN people focus on being in the moment and being more self-compassionate in general. Cognitive behavioral techniques and skills could be incorporated to assist AI/AN clients with their automatic thoughts, images, and core beliefs as well as their emotional well-being, with the goal of establishing a kind, compassionate relationship with their own thoughts and feelings, being more of an observer and investigator of these internal experiences, and noticing one's thoughts and feelings *and* learning how to specifically respond to them internally in helpful, non-judgmental ways.

The fact that self-compassion was related to less perceived burdensomeness and thwarted belongingness within the AI/AN adult community is exciting news for those developing prevention programs in such communities. Self-kindness, common humanity (i.e., realizing the commonalities in our experiences as human beings), and mindfulness (i.e., noticing and acknowledging what we think and feel, without judging ourselves and/or others) could be utilized as skills to be taught at a young age to AI/AN children in schools as well as to adults and older adults in community settings. Not only could the positive aspects of self-compassion allay any feelings of being a burden or not belonging in the future, but it could also increase the ability to cope with one's thoughts and emotions that might be encountered.

As mental health professionals advocate and support AI/AN adults, it would be important for clients' financial resources to be assessed and explored in relation to their emotional well-being

and potential for perceived burdensomeness, thwarted belongingness, and/or other aspects of suicidality. If AI/AN individuals experience job loss, changes in financial resources, and/or lack of financial funds, it would be important to assist in finding financial resources as well as discussing thoughts and feelings associated with financial concerns, given that financial needs could result in people feeling like a burden on others and/or influence their sense of interpersonal connection or belonging.

Finally, mental health care professionals must recognize that AI/AN men may be more at risk for thwarted belongingness than AI/AN women, based on the results of this study. Assessing for disconnections and feelings of remorse or guilt, and/or even feelings of responsibility that could be potentially detrimental to AI/AN men, may be worthwhile. We concur with FitzGerald et al.'s (2017) recommendation that gender differences in protective factors related to suicidality must be taken into consideration when developing prevention and intervention programs for AI/AN individuals to make them more culturally and gender sensitive. Exploring the types of preventative and counseling programs that may benefit AI/AN men and women in unique ways is warranted.

### **Limitations of the Study and Areas for Further Research**

The results from this study need to be interpreted in light of the following potential limitations. Given the survey nature of the study, it is possible that the participants in this study may have responded in socially desirable ways. Participants completed the survey in the waiting room of their IHS and tribal centers, so they may or may not have felt comfortable completing the survey with others nearby. The presenting issues that brought participants into the clinic could have potentially affected their responses to the survey. The majority of participants in this sample were AI/AN adults from the Great Plains of the United States, and thus, the results may not generalize to AI/AN adults from other parts of the country and/or from specific sovereign nations.

Further research is needed to explore the effectiveness of self-compassion and mindfulness-based interventions with AI/AN people who may present with interpersonal suicide risk factors, such as perceived burdensomeness and thwarted belongingness. Researchers could also explore how one's identification with mainstream ways compared to more traditional practices/ways relate to self-compassion and interpersonal risk factors associated with suicidality among AI/AN people. Mixed methods and qualitative methods would allow future researchers to gather further insight into understanding the personal, family/interpersonal, and tribal/cultural factors that might influence self-compassion and/or suicide risk for AI/AN people.

## CONCLUSION

This research on self-compassion as a protective factor related to the mental health and wellness of AI/AN people is the first study of its kind. It is hoped that this information will be beneficial to AI/AN individuals and communities in the future. Given the diverse and unique experiences of AI/AN people and their communities, there is much to be learned from AI/AN traditions/ways as well as from self-compassionate and mindfulness practices in general to enhance the health and wellness of AI/AN people. The blending of these self-compassion and mindfulness practices with AI/AN traditions/ways and healing may guide and support AI/AN individuals and communities in the future.

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