

## Talking Circle Mental Health Intervention with a Mindfulness Approach Among Rural Native American Youth

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### Abstract

**Purpose:** To examine the outcomes of a mindfulness-based intervention for the prevention of mental health disorders among rural dwelling Native American youth ages 10-12.

**Sample:** Native American student participant sample (N=20) was recruited from schools from one rural Native American tribe in the Midwestern United States. The county where the study was conducted is officially designated as a nonmetropolitan county, and it is classified as rural according to the county-level system.

**Methods:** This cross-sectional descriptive study measured mental health outcomes that included stress, anxiety, depression, substance use (alcohol and drugs) and commercial tobacco use. All participants were Native American who resided in rural tribal communities.

**Findings:** Study sample was both female (N=10) and male (N=10), with a mean age of 11.37. Participants self-reported significant decreases in mental health disorders of stress, anxiety, depression, substance use (alcohol and drugs) and commercial tobacco use from baseline pre-intervention to 3-months post intervention. Native Reliance (cultural identity) significantly increased from baseline pre-intervention to 3-months post-intervention.

**Conclusion:** Findings from this pilot study support the use of a mindfulness approach delivered in a cultural based Talking Circle intervention for the prevention of mental health disorders among rural dwelling Native American youth.

*Keywords:* Native American, talking circle, mental health, mindfulness

### **Talking Circle Mental Health Intervention with a Mindfulness Approach Among Rural Native American Youth**

Native American youth experience higher rates of mental health disorders and are more likely to initiate alcohol and substance use by age 11 than any other racial or ethnic group (Swaim & Stanley, 2018; Walls et al., 2020). The impact of COVID-19 on older individuals has been particularly devastating for Native American communities. The loss of Tribal Elders and Native language speakers has taken an immeasurable toll on cultural ties, disrupting the transmission of language and tradition from Elders to younger generations. This loss is especially profound in rural communities, where extended families value living in close-knit households. The COVID-19 pandemic has intensified the challenges faced by Native American people of all ages, who already reported some of the highest rates of psychological distress—including depression, anxiety, life stressors, and substance use (alcohol, drugs, and commercial tobacco)—long before the pandemic. (Hatcher et al., 2020).

According to Mental Health America (2022), 19% of Native Americans reported experiencing a mental illness in the past year. Additionally, Native Americans experience serious psychological distress at a rate 2.5 times higher than the general population (United States Department of Health and Human Services Office of Minority Health, 2021). The devastation of rural Native American communities due to COVID-19, combined with both recent and historical experiences of racism and violence, has had a profound effect on the mental health of Native American youth (Hussong, et al., 2021; SAMHSA, 2021). For an already vulnerable population, the pandemic has been catastrophic, further increasing the risk of mental health disorders among Native American youth in rural areas. Additionally, rural Native American youth face an increased risk of mental health disorders due to a combination of historical, social, economic, and

environmental factors. The long history of colonization forced relocation, and cultural suppression has resulted in intergenerational trauma, contributing to higher rates of stress, anxiety, depression, and substance use (Brave Heart et al., 2011; Vana & Lane, 2021). Many rural Native American communities experience significant poverty, unemployment, and limited access to essential resources—economic hardships that are well-documented risk factors for mental health issues, particularly stress and depression (Sarche & Spicer, 2008). Given these urgent concerns, targeted interventions are critical to improving the mental health outcomes of Native American rural youth.

A critical challenge in rural tribal communities is the shortage of mental health professionals, which restricts access to care. As a result, many youths do not receive early intervention for mental health concerns, leading to worsening conditions over time (Gone, 2023; Gone & Trimble, 2012). Furthermore, the erosion of cultural identity and traditional practices—due to historical assimilation policies, boarding school experiences, and contemporary societal pressures—has had a detrimental impact on mental well-being. However, research indicates that reconnecting with Native American cultural traditions and knowledge can significantly improve mental health outcomes (Masotti, et al., 2023; Whitbeck et al., 2004).

Several overall health interventions have been developed and implemented by adapting other research-supported interventions or the creation of health interventions utilizing culture as treatment (Marsiglia & Booth, 2015). The interventions for Native American youth are at various levels of practice from evidence-based practice to practice-based evidence, through promising practices (BlackDeer & Patterson Silver Wolf, 2020). Several interventions utilizing available community structures such as schools, emergency departments, and the internet as a whole, all show innovation in thinking about sustainability and replicability for other Native American tribal communities. However, they have shown varying degrees of impact on Native American rural youth mental health. Moreover, while most interventions include some aspects of culture, none have used culture as the foundation for a mindfulness approach so that the focus is on being in the present moment, allowing participants to fully engage with the intervention topics under discussion (Yamane & Helm, 2022). To meet this urgent need, the overarching objective of this pilot study was to leverage the empirically proven, highly effective, school based Talking Circle intervention to promote the mental health of rural Native American youth.

In Native American spirituality, the Circle is an underlying, foundational concept, and a sacred symbol of the interdependence of all forms of life. Talking circles are an ancient spiritual practice where the people come together in the sacred circle to connect, tell stories, pray, and heal. The Talking Circle intervention leverages this traditional cultural practice to help Native American youth move away from harmful ways of coping, toward positive ways of being (Lowe, et al., 2019). Endemic to the Talking Circle intervention is mindfulness, a mental state in which awareness is focused on the present moment, allowing youth to fully engage with the intervention topics and activities.

Mindfulness is an integral aspect of cognitive processing due to its core principles of acceptance and awareness, which are crucial given the role of cognitive processing in fostering presence and growth (Dahl et al., 2015). Empirical studies have demonstrated that mindfulness

interventions can alleviate stress, anxiety, and depression while enhancing coping mechanisms (Cooper et al., 2018; Kabat-Zinn, 1982). As a result, mindfulness is recognized as a promising approach for managing mental health risks among youth (Burke, 2010; Lin et al., 2019). Mindfulness-based stress reduction is the most widely used therapy within mindfulness interventions. Systematic meditation training rooted in mindfulness incorporates psychological healing and movement-based elements (Chiesa & Malinowski, 2011; Zhang, et al., 2021). Through practices such as mindfulness meditation and body awareness (Hofman & Gomez, 2017; Zhang et al., 2017), individuals can awaken their inner concentration, improve self-regulation, and achieve therapeutic outcomes, including stress relief, emotional regulation, and enhanced quality of life (Liu et al., 2018; Oró et al., 2021). Furthermore, mindfulness approaches, when implemented as group interventions, can help address the lack of mental health resources in underserved areas, such as rural Native American communities. These approaches offer several advantages, including ease of use, affordability, and long-term effectiveness. They can be widely integrated into resource-limited settings, such as rural schools, reducing treatment costs and improving the overall well-being of rural youth. However, current research is limited regarding the effectiveness of mindfulness-based interventions in preventing mental health disorders among rural Native American youth.

### **Theoretical Framework**

This study was grounded in the concept of Native Reliance, which formed the theoretical basis for the research. Native Reliance is a cultural identity theoretical framework, reflecting the holistic worldview, values, beliefs, and behaviors within Native American culture. Native Reliance has been noted by Native American leaders and cultural wisdom keepers as the mainstay and way of life influencing cultural identity and the health of the Native American and that helps to keep the person in balance (Lowe et al., 2016). Native Reliance refers to having a cultural identity as a Native American, which both motivates and sustains an individual's behavior. The more a participant integrates the values and beliefs shown in the model (Figure 1), the higher their score should be on the Native Reliance Questionnaire (Lowe et al., 2019). Native Reliance comprises five major values and/or beliefs shown in the figure: *seeking truth, making connections, being responsible, being disciplined, and being confident.*

**Figure 1**

*Native Reliance Theoretical Model*



Seeking truth and making connections, shown in the two outer circles, reflect the core values and goals of a Native cultural identity. For Native American, seeking truth and making connections refers to knowing the spirit in everything, including themselves, so that the interrelatedness of all living things become known in all aspects of their lives. The three central components of Native Reliance are shown in the three overlapping circles in the middle. Each circle contains descriptive elements of each cultural identity component, and describes the ways Native American people experience them within the context of their lives, their families, and their communities. Being responsible refers to caring to provide and accepting assistance for what is necessary. Being responsible also refers to providing for others by treating them with respect, being present, being accountable, and by calling on the Creator in the Native language, and honoring the Creator through ceremony. Being disciplined refers to seeking a vision by making decisions based on honor and defending the vision. Being disciplined also refers to sharing the vision by counseling with elders, accepting the vision, and speaking the vision in the traditional Native language. Being confident refers to having a sense of identity by being proud of one's Native American heritage and accepting tribal beliefs and values. Being confident also refers to having a sense of self-worth by facing challenges and contributing to Native American or tribal

knowledge and preserving ancestral stories. These beliefs and values are arranged in a circular manner to represent the circular nature of a Native American world view, including the notion of the circle as sacred.

## **Methods**

### **Design**

A descriptive design was used and data collection methods included self-reported surveys. Study approval was obtained from the University Institutional Review Board (Protocol#00004266) to ensure participants' rights were protected. Data was stored on a password-protected, encrypted cloud platform accessible only to the research team.

### **Sample and Tribal Setting**

This study was conducted in partnership with a Native American tribe in a rural midwestern location. The Tribal Council provided written approval for the study. Historically, the tribe was located in the southeast area of the United States. The tribe's way of life and roles began to change significantly due to the impacts of colonization. Much of the originally southeastern homeland was taken from them through government treaties and the use of force. In the late 1700s and early 1800s, the majority of the tribe chose to relocate westward to protect their culture and way of life from further decline (Library of Congress, 2025). During this time, the federal government also established the American Indian Boarding School system. Efforts to assimilate Native Americans included prohibiting traditional dress and the use of tribal languages in an attempt to strip individuals of their cultural identities (Robbins, 1992). These actions had profound effects on the physical, emotional, psychosocial, economic, and spiritual well-being of Native Americans.

A convenience sample of rural dwelling youth, ages 10-12, were recruited from two elementary rural schools within the boundaries of the participating rural tribe. Potential participants were invited to participate by school counselors and if interested, parents/guardians were contacted and the youth were screened for inclusion into the study. Both parental/guardian informed consent were signed along with the youth signed assent to participate in the study. Inclusion criteria were: (a) age 10-12 years; (b) enrolled in the 5<sup>th</sup> or 6<sup>th</sup> grade of one of the two participating rural schools; (c) a member of the partnering Native American tribe; (d) reside in a rural community located within the boundaries of the tribe; and (e) able to read, write and speak English. Participants were excluded if they had participated or currently participating in an intervention program for the prevention or treatment of mental disorders.

### **Measurements**

Data were collected from participants' self-report at baseline and 3-month post-intervention. A demographic instrument was included which asked for several routine sociodemographic variables. In addition, the participants were asked if they had been involved in intervention(s) other than that offered through the study. To increase willingness to participate in assessment surveys, each student received a graduated (\$10, \$20) incentive for each assessment

survey that he/she completed. The measures include: (a) Native Reliance Questionnaire (NRQ) 24 items rated on a 5-point Likert scale to evaluate the presence of Native Reliance (cultural identity) (Lowe, et al., 2019); (b) Global Assessment of Individual Needs-Quick (GAIN-Q) subscale for Stress (13 items) (Dennis et al., 2006); (c) General Anxiety Disorder (GAD-7) Scale (7 items) (Mossman, et al., 2017); (d) Center for Epidemiologic Studies Depression Scale Revised (CESD-R-10) (10 items) (Radloff, 1977); and (e) Global Assessment of Individual Needs-Quick (GAIN-Q) subscale for Substance Use (21 items) (Dennis et al., 2003). The Cronbach's alpha coefficients of Native Reliance, Stress, Anxiety, Depression, and Substance Use were .92, .85, .80, .82, and .80 respectively.

### **Talking Circle Intervention**

Cultural adaptation of the Talking Circle intervention was done during the first 3-months of the study in collaboration with a Community Partnership Committee (CPC) of six tribal community representatives (tribal leaders/elders, school personnel, teachers, parents, and students). The process for adaptation included: (a) reviewing and recommendations regarding the research process and design, (b) revising and tailoring the intervention manual attending to the particular tribal language, community needs and culturally-appropriate content, and (c) reviewing and providing feedback regarding the study measurements.

In Native American traditions, Talking Circles provide support through the process of coming-together as a place where stories are shared in a respectful manner and in a context of complete acceptance by participants. Native Americans have long used the Circle to celebrate the sacred interrelationship that is shared with one another and with their world (Simpson, 2000). The idea of the talking circle permeates the traditions of Native Americans to this day. It symbolizes an entire approach to life and to the universe in which each being participates in the Circle and all serve an important and necessary function that is valued no more and no less than that of any other being. By honoring the Circle, human beings honor the process of life and the process of growth that is an ever-flowing stream in the movement of life's energy (Garrett, & Carroll, 2011). Talking Circles then, are reflective of this process, and honor the importance of group membership and the presence of other group members for healing and transformation (Running Wolf & Richard, 2003).

Mindfulness is inherent to talking circle participation and engagement. Endemic to the Talking Circle intervention is mindfulness, a mental state in which awareness is focused on the present moment, allowing youth to fully engage with the intervention topics under discussion. Through use of the talking circle, Native American youth can use the support and insight of their tribal brothers and sisters to move away from harmful ways of coping, such as substance use, and toward something else. In this way, the talking circle serves a sacred function of healing or cleansing, while also bringing youth together. The traditional sense of comfort and belonging that engagement in the Circle brings, provides healing for participating youth, and reminds them of life and their place in it (Running Wolf & Richard, 2003). Each youth comes to the Circle as a human being with his or her own concerns, and together the participants seek harmony and balance. Studies have shown that adhering to and living by cultural traditions is associated with reduced

health risks among Native Americans (National Indian Health Board, 2018). However, innovative research investigating the ways in which these traditions enhance prevention among Native American youth is almost non-existent.

The Talking Circle intervention has been recognized by the U.S. Department of Justice’s Office of Justice Programs as a “Promising Evidence-Based Program” for the well-being of youth, recognized as the first manualized Talking Circle intervention, and is featured as one of the American Academy of Nursing’s “Edge Runners,” innovators that is leading the way in bringing new thinking and new methods to a wide range of healthcare challenges, and featured in the National Academies of Science, Engineering, and Medicine Report “The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity” (U.S. Department of Justice’s Office of Justice Programs, 2014; American Academy of Nursing Edge Runner Program, 2016; National Academy of Medicine, 2021).

The Talking Circle intervention was delivered to two groups of 10 participants in each group, once a week for 50 minutes for 10 weeks. The two participating schools provided a private room for the sessions to be implemented. The first session included instructions regarding the general format and expectations of participants, including the importance of keeping all information shared within the circle confidential, an expectation that fits well with the Native American cultural value of respect. Sessions were conducted in the culturally congruent format of a Talking Circle, guided by topics from the culturally tailored, contextually updated manual, using both English and the tribal language (Table 1). The Talking Circle sessions was delivered by facilitators who had been trained to conduct the sessions to the youth participants.

**Table 1**

*Talking Circle Intervention sessions guided by mindfulness concepts*

<b>Native Reliance Theoretical Concept</b>	<b>Session Content Topic</b>
<b>Introduction (Week 1)</b>	<b>Introduction to Procedures and Expectations of Participants:</b> Mindfulness within the sacred space of the talking circle.
<b>Being Responsible (Weeks 2-4)</b>	<b>Cultural Identity and Relationship Building:</b> In a ceremonial and spirit of stillness in connecting with self and then with others. <b>Recognition and Acknowledgement of Potential Mental Health Issues:</b> Identify personal high-risk situations that can lead to mental health disorders from a centered, calm way of being, allowing for recognition and discussion of what is needed to avoid these situations. Attention to self through awareness of what the body feels like when still (mindful body). <b>Family &amp; Peer Conflict Resolution:</b> Learn/rehearse a mindful way of being as groundwork for managing conflicts with families & peers. Traditional Native American family structures/roles, & way of caring for self & others.
<b>Being Disciplined (Weeks 5-7)</b>	<b>Social Support:</b> Identify resources; the value of stillness as a grounding for being supportive for others. Mindfulness process of calming a wandering mind;

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	<p>thinking of someone in everyday life; heart filled with love and surrounding another.</p> <p><b>Self-Monitoring:</b> Monitor stress, practice mindfulness techniques when stressed &amp; consider how to cope without the use of substances/commercial tobacco.</p> <p><b>Commitment Generation:</b> Make decision to commit to create a plan to develop alternative behaviors to destructive behaviors. Use Native American traditional activities &amp; be true to self with discipline.</p>
<p><b>Being Confident (Weeks 8-10)</b></p>	<p><b>Acceptance of Personal Strengths:</b> Identify personal attributes, strengths/gifts/talents, cultural beliefs &amp; values grounded in a Native American sense of self.</p> <p><b>Practicing Managing Stress:</b> Connect to &amp; rehearse ways learned to respond to stress. Use personal and cultural attributes to manage stressful situations.</p> <p><b>Coping with Stress:</b> Participants share how to recognize stress &amp; identify useful personal &amp; cultural attributes, strengths/gifts/talents (including mindfulness) as non-destructive strategies for coping with stress</p>

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### Data Analyses

The IBM Statistical Package for the Social Sciences (SPSS) was used to perform descriptive statistics (means, standard deviations, and confidence intervals) that were calculated to summarize participant characteristics and outcome variables at baseline and 3-month follow-up. To evaluate the preliminary impact of the intervention on Native Reliance (cultural identity), Stress, Anxiety, Depression, and Substance Use, paired-samples t-tests were conducted to compare pre-intervention (baseline) and post-intervention (3-month) scores. This statistical testing is appropriate because the same participants were measured at two time points, allowing for assessment of within-subject changes over time.

The feasibility of the Talking Circle intervention to promote reduced Stress, Anxiety, Depression, and Substance Use and enhanced Native Reliance (cultural identity) for youth participants was examined using indicators consistent with recommendations for pilot feasibility studies. These indicators included preliminary intervention effects, assessment completion, and data quality (Pearson et al., 2020; Teresi et al., 2023). Changes in outcomes over time were examined to assess whether the intervention demonstrated early indications that were beneficial. The feasibility indicators provided insight into both the practicality of implementing the Talking Circle intervention within a tribal youth setting and the potential for the intervention to promote reduced Stress, Anxiety, Depression, and Substance Use and enhanced Native Reliance (cultural identity). Positive trends in these outcome measures are considered evidence of potential effectiveness that warrant future testing as a larger scale study.

### Results

A total of 20 Native American youth, ages 10-12, participated in the study who were enrolled in the 5<sup>th</sup> & 6<sup>th</sup> grades. All participants identified as Native American and there were no attrition. Parental consent and child assent were obtained. The eligible students reported that they

have never participated in other mental, emotional, or behavioral programs or interventions. Age and gender were compared by using the t-test and  $\chi^2$ -test, respectively. The average mean age of the participants was 11.37 (SD  $\frac{1}{4}$  1.30),  $t \frac{1}{4}$  4.86,  $p \frac{1}{4}$  .39. There were 10 female and 10 male participants and the  $\chi^2$ -test showed that the gender distribution was not different,  $\chi^2 \frac{1}{4}$  3.36,  $p \frac{1}{4}$  .07. The outcome measures were found to be sufficiently reliable. Data analyses were conducted by paired t-tests to compare outcomes before and after the intervention.

### ***Native Reliance (Cultural Identity)***

As displayed in Table 2 and Figure 2, Native Reliance (cultural identity) scores revealed an increase from baseline mean score 96.3 to 3-month post mean score 106.4. The results suggest that the Talking Circle intervention was effective in increasing Native Reliance (cultural identity) among participants.

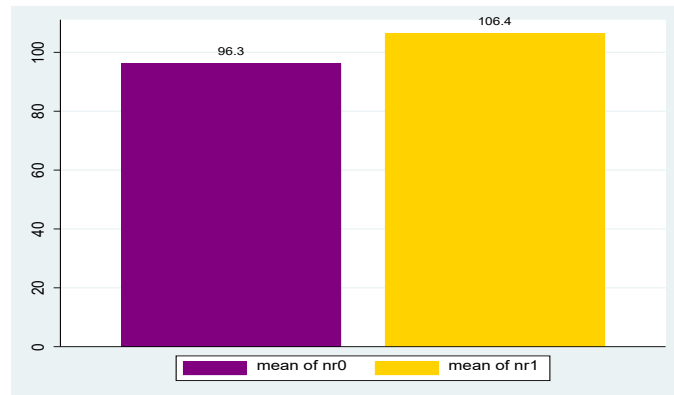
**Table 2**

*Changes of Native Reliance (Cultural Identity) marginal means over time*

Variable	Obs.	Mean	Std. err.	Std. dev.	[ 95% Conf. Interval ]
Native Reliance					
Time					
<i>baseline</i>	20	96.3	2.515321	11.2488	91.03537 101.5646
<i>3-months</i>	20	106.4	2.22119	9.933463	101.751 111.049
<i>diff</i>	20	-10.1	1.713568	7.66331	-13.68654 -6.513461

**Figure 2**

*Margins plot of Native Reliance (Cultural Identity) across time*



### ***Stress***

The results revealed a decrease in stress from baseline mean score 4.25 to 3-month post mean score 3.6 (Table 3). The results indicate that the Talking Circle intervention was effective in decreasing stress among participants.

**Table 3***Changes of Stress marginal means over time*

Variable	Obs.	Mean	Std. err.	Std. dev.	[ 95% Conf. Interval ]
Stress					
Time					
<i>baseline</i>	20	4.25	.623551	2.788605	2.944893 5.555107
<i>3-months</i>	20	3.6	.5448322	2.436564	2.459653 4.740347
diff	20	.65	.15	.6708204	.336064 .9639536

**Anxiety**

Anxiety scores had a decrease from baseline mean score 7.15 to 3-month post mean score 5.5 (Table 4). The results supports the premise that the Talking Circle intervention was effective in decreasing anxiety among participants.

**Table 4***Changes of Anxiety marginal means over time*

Variable	Obs.	Mean	Std. err.	Std. dev.	[ 95% Conf. Interval ]
Anxiety					
Time					
<i>baseline</i>	20	7.15	1.31244	5.869412	4.403031 9.896969
<i>3-months</i>	20	5.5	1.141329	5.104178	3.111171 7.888829
diff	20	1.65	.2086927	.933302	1.213201 2.086799

**Depression**

The results also revealed a decrease in depression from baseline mean score 10.35 to 3-month post mean score 7.8 (Table 5). The results suggest that the Talking Circle intervention was effective in decreasing depression among participants.

**Table 5***Changes of Depression marginal means over time*

Variable	Obs.	Mean	Std. err.	Std. dev.	[ 95% Conf. Interval ]
Depression					
Time					
<i>baseline</i>	20	10.35	1.497849	6.698586	7.214965 13.48503
<i>3-months</i>	20	7.8	1.150743	5.146281	5.391466 10.20853
diff	20	2.55	.4441135	1.986136	1.62046 3.47954

**Substance Use**

Substance use was decreased from baseline mean score 5.2 to 3-month post mean score 4.2 (Table 6). The results indicate that the Talking Circle intervention was effective in decreasing substance use among participants.

**Table 6**

*Changes of Substance Use marginal means over time*

Variable	Obs.	Mean	Std. err.	Std. dev.	[ 95% Conf. Interval ]
Substance Use					
Time					
<i>baseline</i>	20	5.2	1.362274	6.092273	2.348729 8.051271
<i>3-months</i>	20	74.2	1.096886	4.905421	1.904192 6.495808
diff	20	1	.2901905	1.297771	.3926243 1.607376

### Qualitative Results

Interviews with the Talking Circle intervention facilitators supported both ease of integrating the program in the school setting and benefited youth participants. As summarized in Table 7, the intervention facilitators reported that the Talking Circle sessions were consistent with the needs within the schools; for example—“it was great that the intervention sessions provided students with services they were not currently receiving.” Facilitators indicated that the focus on cultural identity made it easier to engage and talk with students; for example—“it reinforced to students the importance of cultural values, beliefs, and behaviors.” Providing a focus on health made it easier to build a relationship with school personnel; for example—“overall, the Talking Circle intervention enabled me to establish deeper relationships with school personnel because I knew about the importance of overall mental health.” Moreover, the facilitators identified that the intervention provided clear goals for improving the participating students behavior, making it easier for the students to see change in behavior with an increase in cultural identity.

**Table 7**

*Feasibility, Acceptability, Effectiveness, and Recommendations Themes From Facilitator Interviews About the Talking Circle Intervention Program*

Theme	Description
Feasible	<ul style="list-style-type: none"> <li>• Easily integrated into existing school systems</li> <li>• Aligned well with current workflows</li> </ul>
Acceptable	<ul style="list-style-type: none"> <li>• Sessions provided students with services not currently available</li> <li>• Facilitated stronger engagement with students</li> <li>• Enabled relationships with school personnel</li> </ul>
Effective	<ul style="list-style-type: none"> <li>• Provided clear, actionable goals for behavior change</li> <li>• Helped students recognize importance of cultural identity, values, beliefs, and behaviors</li> <li>• Made it easier for students to see improvements in overall mental health</li> </ul>

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- Recommendations
- Provide the program online
  - Expand the number of sessions
  - Develop a peer support program to continue the program
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## Discussion

The findings of this study provide evidence that a culturally based intervention was effective in reducing mental health disorders and enhancing cultural identity among rural Native American youth aged 10-12. Within many rural Native American communities, the risk of mental health disorders presents unique challenges for prevention (Listug-Lunde, et al., 2013). Despite the high need for mental health interventions among rural Native American youth, research in this area remains limited compared to programs targeting other racial and ethnic groups (BlackDeer, 2023).

Studies have established a link between Native American youth and high rates of trauma, loss, and other adverse childhood experiences, which are often associated with increased substance use (Hannah, et al., 2016). However, prevention strategies that have proven effective in other populations may be less impactful for Native American rural youth due to differences in cultural identity, upbringing, and environmental influences. Few studies have explored the prevention of mental health disorders using a mindfulness approach within a culturally based Talking Circle format (Lowe, et al., 2024). This study supports the idea that culturally grounded prevention strategies are a crucial approach to addressing mental health disorders in this age group.

Research has shown that the loss of cultural values and identity significantly contributes to mental health disorders among Native Americans. For community health interventions to be effective, they must be culturally responsive, reflecting the values, beliefs, and traditions of the target group (Bernal & Saez-Santiago, 2006; Joo & Liu, 2021; Magaña et al., 2021). Studies indicate that culturally tailored interventions are significantly more effective than generic approaches, as they promote health equity, reduce disparities, leverage community strengths, and foster greater engagement (Hearod, et al., 2019). In particular, school-based intervention programs provide an opportunistic setting to provide programs such as the Talking Circle intervention implemented in this study (Malboeuf-Hurtubise, et al., 2024).

As evident in this study, Native American cultural and value-based characteristics can be integrated into existing evidence-based interventions or used in developing interventions from the ground up to create cultural and evidence-based interventions. This study integrated the Native Reliance theoretical concepts, which encompasses the holistic worldview, values, beliefs, and behaviors central to Native American cultures, into the Talking Circle intervention. The significantly higher Native Reliance scores among participants post-intervention highlight the effectiveness of using a culturally based approach in promoting mental health and well-being (Hirchak et al., 2022).

Careful attention to cultural adaptation within mental health disorder prevention efforts must consider the holistic thinking processes of Native Americans (Goodkind et al., 2012). Compared to other cultures that primarily rely on linear thinking, Native Americans

typically process new information in a circular manner (Crow, 1993; Lowe, et al., 2024). Rather than breaking down topics into separate parts, they perceive the entire picture, similar to viewing a landscape in its entirety. The mindfulness based Talking Circle intervention guided by the Native Reliance theoretical concepts contributed to the circular thought processes transition fluidly from concept to concept without following a strict sequential or stepwise methodology. As a result, youth participants are provided opportunities to experience and understand life as a circular process. This perspective is particularly relevant when addressing mental health risks, given their profound impact on rural Native American communities (Baldwin, et al., 2020).

### **Limitations**

The pilot study was conducted among one rural Native American tribe located in the Midwest. This raises valid questions regarding the generalizability of the study's findings to urban Native Americans living in other regions of the United States. There may be cultural differences in the onset of mental health disorders related to stress, anxiety, depression, and substance use among Native American youth within various tribal communities both rural and urban. What may be considered a problem within one tribal community may not be perceived as a problem for another. This study does not reflect a random sample of all schools with Native American students and participation by the students was voluntary. However, the sample in this study does represent rural Native American populations within diverse geographical regions. Additionally, because the study took place in schools, the sample does not include Native American youth who have dropped out of school and who could more likely be experiencing mental health issues.

### **Conclusions**

The results of this study clearly indicate that Native American youth ages 10-12, respond positively to a culturally based intervention for the reduction of mental health risks. The association between a cultural based approach and Native Reliance (cultural identity) was significant among the Native American youth who participated in the Talking Circle intervention. Due to the urgent mental health issues among rural Native American youth, it is imperative to understand and address these needs from a cultural perspective. Future research is needed to identify, measure, and ascertain the effects of cultural interventions to improve and meet the changing mental health risks of rural Native American youth.

### **Conflicts of Interest**

The authors declare no conflicts of interest.

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