

# Ethnic Racial Identity Development and Self-Esteem among Native American<sup>1</sup> Adolescents: The Mediating Role of Peer Belonging

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**Abstract:** While ethnic racial identity (ERI) development is associated with a variety of psychological well-being outcomes, the mechanisms through which this association operates is yet to be fully explained. During adolescence, social belonging is a developmentally salient process that can play a key role in how ERI impacts well-being. We sought to explore the mediating role of belonging to peer networks in the association between ERI and self-esteem among Native American adolescents. In this cross-sectional, mediational study, we used survey data from 317 Native American students attending a reservation high school (46.9% female; *M* age = 16). Students' levels of ERI development were measured by combining items from two scales pertaining to ethnic identity development and racial identity. We employed a structural equation modeling approach to explore the mediating role of peer belonging in the association between ERI and self-esteem. Results suggest that our 4-item index of peer belonging was an acceptable measure of this construct. Further, the significant indirect effect of peer belonging explains a notable portion ( $\beta = .22, p < .05$ ) of the total effects of ERI on self-esteem ( $\beta = .54, p < .05$ ). This finding suggests that higher levels of ERI achievement contribute to higher levels of peer belongingness, which in turn lead to improved self-esteem among students. Implications for research and practice are discussed.

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<sup>1</sup> We recognize that the preferred term in this journal is "American Indian and Alaska Native." Since at the time of the data collection in this study we used the term "Native American" with the participant population, we feel it is more appropriate to maintain this term throughout the manuscript. However, and as recommended, we have increased the use of the term "Native Adolescents."

## INTRODUCTION

Identity formation has been noted to be a staple of adolescent development, and identity achievement has been conceptualized as a goal of this developmental stage (Erikson, 1968). For ethnic and racial minority adolescents, ethnic racial identity (ERI) development is a key aspect of identity achievement (Phinney, 1989). Achieved ERI has been linked with a number of indicators of positive psychological well-being, including high self-esteem (Goodstein & Ponterotto, 1997; Mandara, et al., 2009; Umaña-Taylor & Updegraff, 2007), greater number of friends in school (Zirkel, 2004), low incidence of mental health symptomatology (Wong, et al., 2003), body image (Newman, et al., 2005), and higher quality of life (Lim, et al., 2016; Utsey et al., 2002). Extant literature has explored various mechanisms through which ERI development can contribute to such positive outcomes. However, despite unequivocal support for the developmental relevance of peer network dynamics during adolescence (Delgado et al., 2016; Furman & Rose, 2015; Larson et al., 1996), limited research explores whether peer interactions can serve as a mechanism through which ERI impacts psychological well-being.

Shortcomings in the literature are especially evident when exploring the experiences of Native American adolescents. The current study seeks to address these gaps by investigating the nuances of how the importance of peer relationships in this developmental age interacts with Native adolescents' ERI and self-esteem. We propose and test one specific model through which perceptions of belonging to peer groups mediates the strong association between ERI development and self-esteem. Our model is driven by the general developmental relevance of peer relationships as well as the particular cultural valence of this construct for Native American students.

### **Theoretical Foundations**

#### *Psychological Well-Being in Native Communities*

Indigenous scholarship on the roots of psychological well-being among Native American people has emphasized balance between the four domains of health and wellness indicated in the medicine wheel: heart, mind, body, and spirit (Cross, 1998; Tanner et al., 2022) and interrelationships across interconnected environmental levels (O'Keefe et al., 2022). Focusing on children in particular, the Indigenous Connectedness Framework by Ulrich (2019) encourages us to contextualize well-being through a relational prism whereby children's functioning is situated

in the context of their connections. The experience of connectedness with a variety of domains, such as spiritual, intergenerational, family, community, and environment, has “sustained” Native American children (Ulrich, 2019, p.121). That is, the author contends that because children are nested within their ancestral, familial, and communal relationships, their well-being is protected. This experience is reciprocal in that children also play a role in the well-being of their environments because others’ relationships and responsibilities towards children protects Native American well-being. For Native American children, knowing who they are through their connections and their place within time and space is a powerful skill, and ERI is one aspect of how they exercise this interrelatedness during adolescence.

### ***ERI Development and Psychological Outcomes***

Scholarship on ethnic and racial identity processes is trending towards combining what was once considered two distinct areas of development. The field has evolved to recognize the intertwined nature of individuals’ racial and ethnic identities and their influences on psychosocial functioning, leading to the creation of a meta-construct called *Ethnic Racial Identity* (Umaña-Taylor et al., 2014). Importantly, ERI is operationalized as both the beliefs and attitudes towards ethnic/racial group memberships as well as the processes through which they evolve over time. Generally, theories of ERI posit developmental frameworks through which individuals move within hierarchical stages of identity formation. Phinney (1989) divides this process into three stages: (a) unexamined ethnic identity—individuals have yet to reflect and process the positive or negative views they may hold about their group membership; (b) ethnic identity search (or exploration)—individuals have begun to explore what it means to be a group member; and (c) achieved ethnic identity—individuals have examined their ethnic group membership and hold a solid understanding of the meaning of their ethnicity in their life. Phinney asserts that a positive sense of ethnic group membership is a staple of successful ethnic identity development. During adolescence, the outcomes of navigating this hierarchical process can include different dimensions such as *centrality*, the extent to which racial identity matters to self-concept; *private regard*, affective attitudes towards in-group members; and *public regard*, beliefs about how others perceive in-group members (Sellers et al., 1998). In addition to taking a developmental outlook, scholars have also emphasized the need to contextualize ERI processes and outcomes within socio-historical realities. That is, different social contexts and realities can give rise to different trajectories for ERI development and can lead to different outcomes. Notwithstanding, recent research into the impact of ERI development on various indicators of psychological well-being,

including self-esteem, mental health symptomology, and quality of life of minoritized students, especially under conditions of discrimination, suggest a general positive association (Rivas-Drake et al., 2014; Umana-Taylor et al., 2014; Yip et al., 2019). That is, individual adolescents at more achieved levels of ERI exhibit better outcomes than those at less achieved levels.

While the above mentioned research is substantial, experiences of Native adolescents are typically unexplored in this field. To our knowledge, only two studies employing Native adolescents were found: Jones and Galliher (2007) reported an association between ethnic identity and psychosocial functioning in Navajo adolescents. Furthermore, Smokowski et al. (2014) established that self-esteem mediated the relationship between ethnic identity and mental health in research involving an ethnically diverse sample consisting of 28.5 percent Lumbee youth. In Canada, Gfeller and Armstrong (2012) discovered explicit evidence for a positive association between the level of ethno-cultural affiliation and indicators of adaptive functioning in a study of First Nation adolescents' ERI.

### ***Self-Esteem and Ethnic Minority Adolescents***

Evidence for a link between ERI and positive development is especially robust when utilizing self-esteem as an indicator of psychological well-being (Phinney & Chavira, 1992; Umaña-Taylor, 2004). Self-esteem defined here refers to one's overall sense of self-worth or value. Meta analyses that have explored the link between ERI development and psychological well-being have consistently included studies utilizing self-esteem as a proxy (Rivas-Drake et al., 2014; Smith & Silva, 2011). These studies found stable associations between positive ERI and self-reported self-esteem. Jones and Galliher (2007) used this theoretical framework to explore its implications for Native adolescents and found corroborating results. Navajo adolescents demonstrated higher levels of self-esteem if they had traversed through the exploration stage of ethnic identity development and achieved a strong sense of ethnic heritage. Notwithstanding, we recognize two complicating factors in the use of self-esteem as our outcome variable.

First, Phinney and Chavira (1992) stress the nuances of the reciprocal relationship between ethnic identity development and self-esteem. While higher stages of ethnic identity achievement can lead to higher self-esteem, it is crucial to recognize that individuals with higher self-esteem may also hold skills that enable a successful examination of their ethnic identities. This is especially salient for minoritized adolescents who must navigate identities that are often socially marginalized. Second, scholars of Native American psychology often argue for a reconsideration

of how the self is defined (Trimble, 1987; Tsethlikai et al., 2018). For instance, Fryberg and Markus (2003) have found that Native American adolescents conceive of their sense of individuality through a far more socially interconnected lens than their European American counterparts. This scholarship leads us to be cognizant of how extant measures of self-esteem, a concept centered around the sense of self, may be operationalized in a way that does not align with how our target population understands it.

Nuances of the relational worldviews held by Native American communities encourage us to critically consider both how to analyze results obtained through existing measures, as well as how to formulate conclusions. While we use a popular measure of self-esteem previously employed with Native adolescents (Goodkind et al., 2012), we explore the need for more holistic measures of this construct in our proceeding sections.

### ***Mechanisms***

While psychological literature provides support for the impact of ERI development on psychological outcomes, fewer studies have explored the mechanisms through which this impact occurs. Two distinct mechanisms can be gleaned from previous scholarship in this area. First, Brewer (1991) argues that a positive ethnic racial identification contributes to positive psychological outcomes because it can simultaneously fulfill two psychological needs: “the need for inclusion” and “the need for feeling different” (Bratt, 2015, p. 674). That is, individuals experience a sense of belonging through their shared experiences and a sense of self-esteem through distinguishing themselves from members of other ethnic racial groups. Kiang et al. (2006) further lend support to this finding by noting that increased ethnic identification can facilitate opportunities for social integration that, in turn, can afford health benefits (e.g., happiness, calmness). Other scholars have argued that identifying with socially marginalized groups leads individuals to experience greater levels of racial centrality and attachment (Spencer-Rodgers & Collins, 2006). Spencer-Rodgers and Collins argue that conceptualizing discrimination as a collective experience shared by other group members can play a role in developing a strong sense of self as a member of an ethnic group (centrality), which in turn can foster belonging (group attachment). The increased cohesiveness among members of a group leads to more positive in-group interactions, increasing self-esteem.

A second noteworthy mechanism through which ERI impacts psychological outcomes is the buffering impact of ERI in the face of adversities. Kiang et al. (2006) found that a higher positive regard for one’s ethnic group membership offered an “extra boost of positivity” (p. 1348)

in the lives of ethnic minority adolescents. Positive affect towards one's ethnic group thus helped individuals cope more effectively with daily stressors and mental health symptoms. Graham et al. (2009) lend support to this framework by noting that increased levels of peer belonging among ethnic minority adolescents serve as key mechanisms through which they can more adeptly navigate life challenges. Phinney and Chavira's (1992) circular framework for understanding the mechanism through which self-esteem is impacted is especially salient to this study. According to their model, higher levels of self-esteem can enable individuals to navigate through the challenges associated with developing a strong sense of ethnic identity (e.g., facing up to stereotypes that may exist against their ethnic group). Reconciling trials faced by one's ethnic group can lead to the development of a resolute understanding of one's background, which can foster a positive self-concept. Next, we will discuss how these two mechanisms (i.e., fulfilling the need for social integration and belonging as well as serving a protective role in the face of adversities) can manifest themselves in a sense of peer belonging.

### ***Peer Belonging in Schools as a Potential Mediator***

Peer relationships are key to adolescent development as individuals transition into interpersonal relationships with people outside of their immediate families (Furman & Rose, 2015; Rubin et al., 2008). As such, models capturing predictors of adolescent academic performance (Delgado et al., 2016) and psychological well-being within school contexts—such as belongingness (Williams & Hamm, 2018)—have stressed the important role of peer networks. Faircloth and Hamm (2005), for instance, use friendship nominations in school as an indicator of how well an individual is situated within a peer network. Position within a peer network system is then used as a sign of how adolescents experience belonging in school. The authors note that the way students experience their place within a peer network can speak to a number of school-related outcomes, including motivation and positive school affect. Given Indigenous scholarship that emphasizes ties between people as the potent element driving resilience, for Native American students, the quality of relationships with peers can be an especially relevant conduit for well-being (Ulrich, 2019).

We situate the experiences of Native adolescents with other youth in the Indigenist Ecological Systems Model (IESM; Fish et al., 2022) to understand the association between peer relationships, ERI, and psychological well-being. The IESM is an evolved version of Bronfenbrenner's Ecological Systems Model (1979) which advocates for benefiting from

Indigenous epistemologies to restructure the levels involved in the framework. Importantly, the IESM places the chronosystem at the epicenter of Native American development. The chronosystem refers to the sociohistorical dynamics that intergenerationally impact the individual and related others in the past, present, and future. Importantly, Fish and colleagues (2022) recognize not only the past, but also the future, such as the legacy of current people for future generations. The macrosystem follows the chronosystem, emphasizing the impact of sociocultural factors on people's functioning in this world. The framework then introduces the individual as the third level, a juxtaposition with Bronfenbrenner's framework, which initially starts with the individual. The IESM stresses that Indigenous peoples' development is first and foremost situated on a time continuum between historical/generational incidents and future directions (chronosystem). Furthermore, the model emphasizes the potency of Indigenous sociocultural belief structures, such as language, relationality, and spirituality, on the functioning of individuals (macrosystem). This approach, the authors argue, is in contrast with Western models that place the macrosystem as a distal factor shaping development.

In the IESM, peer relationships in school settings can be situated at the microsystem level whereby adolescents build patterns of relationships with other youth that are informed by sociohistorical and sociocultural contexts. Fish and colleagues (2022) argue that interactions with the microsystem, such as peer groups, is especially relevant for Indigenous youth given their unique experiences as they navigate multiple ethnocultural spaces that are distinct from each other throughout their development (Fish et al., 2022, p.624).

Combining the previously discussed mechanisms through which ERI generally impacts psychological outcomes with Indigenous scholarship on the unique sociocultural contexts within which Native adolescents operate, we postulate two pathways wherein ERI distinctly impacts self-esteem through peer relationships. First, and at a more general level, adolescents who are aware of their ERI likely view their ethnically similar peer groups as a space for exercising optimal levels of connectedness as well as individuation. Additionally, it is possible that they feel a special connection with their peers in navigating life adversities. Stronger levels of ERI can therefore contribute to more affiliative experience with peers, which in turn can impact well-being. Second, and specific to the experience of Native Americans living on reservations, students who experience higher levels of ERI are likely known by their peers as individuals committed to their cultural heritage, which in turn can garner more respect and affiliation. The unique socialization experiences of adolescents within reservation settings encourages them to value individuals who

actively engage in cultural practices within their community. Students with higher levels of ERI may therefore perceive higher levels of respect and affiliation by their peers, which in turn directly translate into higher levels of self-esteem.

Support for the consideration of peer belonging as a mediating mechanism can especially be garnered from a qualitative study of Native adolescents attending a reservation high school (Hosseini et al., 2018). In this study, students pointed to two trends. First, students consistently noted that their relationships with peers played a significant role in their well-being, specifically their sense of school belonging, their ability to cope with adversities, and their overall psychological functioning. This is an excerpt capturing a male student's comments on the essence of peer relationships in promoting his psychosocial functioning in school: "So when I, when I come to school, I'm looking forward to seeing all my friends here. Cause they [keep me] sane and stuff. And so ... if it wasn't for them, I probably wouldn't have the grades I have now, because they're always bringing me up." A female student added, "I kind of feel lost when like all my friends are gone from school. Like, like that's happened before, and I feel like I was...did not fit in here or something...".

Second, students emphasized that they care about how their peers navigate their ERI development. They are attuned to whether peers respect versus disrespect their cultural norms, and they associate meaning to their friendships depending on what they observe in peers. A female student noted, "I don't know, like I don't think some kids around here are proud of our Native culture. That's how I feel, like sometimes I walk around, and another thing that really grinds my gears is when I see kids walking around here, wearing like Indian, like a naked girl on their shirt with an Indian headdress on...". Another student adds, "[There are kids who are] trying to do the drum ceremony, burn sage or whatever, then there's kids playing on their phones while...Yeah there's like some kids that are like actually--like who actually does want to do it, then like the others, like they don't care."

Taking note of these two perspectives, we label this type of peer integration in the context of ERI development as "peer belonging" and note its central role in predicting positive school experiences and positive psychological outcomes. We operationalize peer belonging as students' perceptions of how well they are accepted and received by their peer groups. The fact that these adolescents centered their school experiences and psychosocial well-being around how they were received by their peers can at least be partially explained by the powerful role of peoplehood in Native American socialization practices (Holm et al., 2003). These comments exemplify previous



scholarship on the importance of understanding Native American psychological processes through a relational lens (Tsethlikai et al., 2018). Scholars have consistently advocated for understanding the nuances of how a collectivist worldview can impact psychological processes and outcomes among diverse groups of Native Americans. The sense of relatedness and attachment among peers can therefore be an especially relevant construct in the association between ERI and psychological well-being.

### **The Current Study**

In the present study, our focus on peer networks is driven by the literature supporting the centrality of peer relationships during adolescence, adolescent voices from the current sample delineating the pivotal role of their friends in their day-to-day functioning and in relation to the ERI experiences, and the supremacy of relational worldviews among Native Americans (Ulrich, 2019).

We postulate that ERI development predicts self-esteem as one measure of psychological well-being, and this association is mediated by a sense of peer belonging such that stronger ERI increases students' abilities to perceive belonging to their peer groups, which in turn leads to higher self-esteem. Scholarship on ERI urges explorations in this field to consider the nuances of how each specific ERI dimension interacts with developmental and sociohistorical contexts to impact outcomes. We are particularly interested in ERI domains that have visible behavioral manifestations because we are especially interested in how students' ERI is perceived by other students, in turn impacting peer belonging. As such, we have focused on ethnic exploration, ethnic commitment, and racial centrality. We assume that exploration includes clear behavioral tendencies that other students can observe, and belonging and centrality both entail positive interactions and affiliations with other in-group members that other students can observe. We avoid including domains that are affective, e.g., private and public regard, because they are personal attitudes that may not necessarily reflect external behavioral manifestation. Finally, we use the concept of peer belonging to address gaps in the literature regarding the potential function of peer relationships in schools as a salient developmental and cultural concept. We hypothesize that: 1) an index of peer belonging can be obtained with adequate factor loadings from items across the Everyday Experience, Identity, and School Life Survey (EEISL); and 2) a sense of peer belonging can mediate the relation between ERI and self-esteem. A structural equation modeling approach allowed for a factor analysis of a peer belonging index while also elucidating the mediating role of the construct.

## METHOD

### Context

The data for this study were collected from Native American adolescents attending one reservation high school in the Upper Midwest. The reservation is located in a sparsely populated region that must withstand extreme climatic conditions. Over time, individuals from “other tribes” moved into this reservation through intertribal alliances and workforce opportunities. The nearest major metropolitan area is within a driving time of five hours, and there is no public transportation. During much of the school year, mobility is limited by the severely cold weather and distances between the reservation center and most homes are miles apart. There are limited public social gathering areas in this community. As such, students traveling to and from high school in buses often lack opportunities to gather with members of their peer groups outside of school. Most formal activities (e.g., athletic events, wedding receptions, winter pow wows) take place on school grounds. The particular reservation population is remarkably young: 37 percent are under the age of 20.

### Participants

Using a stratified sampling method based on gender and grade level, 344 students (47.1% female;  $M$  age =16,  $SD$  =1.5) from all four high school grades were recruited to participate in the EEISL study. Since we were studying peer belonging and ERI among Native American students, this analysis included only those who self-designated as Native American, Native Hawaiian, and/or Other AI/AN within the overall sample. A total of 27 participants (7% of total participant population) who did not identify as Native American, Native Hawaiian, and/or AI/AN were excluded from the analysis. These students identified as White ( $n=16$ ), Hispanic ( $n=2$ ), African American ( $n=2$ ), other ( $n=3$ ), and chose not to respond ( $n=4$ ). The final sample consisted of 317 participants who identified as Native American (46.9% female;  $M$  age =16).

Students were able to choose multiple response options when determining their ethnic identity. As such, some students only chose one ethnicity, while others chose multiple ethnicities. Of the total number of students included in this study, 111 (35.1%) chose more than one ethnic affiliation, while 205 (64.9%) exclusively chose one. Of these 205 students who chose just one affiliation, 134 students (65.3%) exclusively self-identified with the local tribe, 69 students

(33.7%) exclusively self-identified as other AI/AN, and two students (1%) exclusively self-identified as Native Hawaiian.

## **Procedure**

This study was part of a larger project that examined school connectedness, identity, psychological well-being, and academic engagement. The invitation to conduct this project came from the Native American school guidance counselor in the participating school for this study. For detailed information regarding the collaborative process, see Ruedas-Gracia et al. (2020). In accordance with standard operating procedures in the schools and with cooperation of the school administration, we obtained passive consent. Parents received a letter from the school describing the study and providing assurances that their child's participation was both voluntary and confidential. Parents were invited to contact a designated school administrator or the second author within two weeks if they had additional questions or wished to see the actual survey. No parent refused their child's participation.

The Native American school guidance counselor referenced above oversaw administration of surveys included in this study along with the second author. Students were invited to come to the school cafeteria or to the teachers' lounge to respond to the survey in small groups. Prior to responding, students received instructions from the survey administrators including a brief description of the study. Survey administrators answered questions, collected assent forms, monitored the room, and collected the surveys. Only two students declined to participate based on their English proficiency. The assent procedure and survey administration took approximately 25 minutes to complete. Each respondent received \$5 as compensation for their participation. The procedures for this research were approved by the local tribal research review board and the Institutional Review Board at Stanford University.

## **Measures**

### ***Self Esteem***

The 10-item Rosenberg Self Esteem Scale (RSES; Rosenberg, 1962) is a widely used measure of global self-esteem that has previously been used to capture this construct with Native adolescents (Whitesell et al., 2009; Hoffman et al., 2021). Response options range on a 5-point scale between *Strongly Disagree* (1) to *Strongly Agree* (5). Items are summed for a total score (after reverse coding). Respondents' overall score is computed based on the mean value of

responses. Sample items include “On the whole, I am satisfied with myself” and “I feel I do not have much to be proud of.” Internal consistency in the current study was high at  $\alpha = .86$ .

### ***Ethnic Racial Identity***

In this study, the Multigroup Ethnic Identity Measure-Revised (MEIM-R; Phinney & Ong, 2007), which assesses ethnic identity development across diverse groups, was combined with racial centrality items of the Multidimensional Inventory of Black Identity-Teen (MIBI-Teen; Scottham et al., 2008) to create a measure of the meta-construct of ERI. The reliability of this meta-construct was .87. The 6-item MEIM-R consists of two factors, identity exploration (3-items,  $\alpha = .77$ ) and identity commitment (3-items,  $\alpha = .77$ ). This scale has previously been used with Navajo high school students (Galliher et al., 2011). A sample item includes: “I have a strong sense of belonging to my own ethnic group.” Response options range from *Strongly Disagree* (1) to *Strongly Agree* (5). The 3-item MIBI-Teen racial centrality dimension was modified for relevance to Native adolescents and included items such as “Being Native American is an important part of who I am.” Response options range from *Strongly Disagree* (1) to *Strongly Agree* (5) and internal consistency was adequate at  $\alpha = .67$ . This scale has previously been adapted for use with Native adolescents and found to be quite reliable (Hoffman et al., 2021).

### ***Peer Belonging***

We created a 4-item index of peer belonging using two items from the Psychological Sense of School Membership scale (PSSM; Goodenow, 1993) that pertain to the role of peers when thinking about school belonging. These items include “Other students in this school take my opinion seriously” and “Other students here like me the way I am.” These items were measured on a 5-point scale ranging from *Not at All True* (1) to *Completely True* (5). Two previous studies exploring use of the PSSM with Native adolescents reported high reliability (Hussain et al., 2018; Ruedas-Gracia et al., 2020). Additionally, two items were added to this index that captured students’ experiences with bullying taken from the High School Survey of Student Engagement (HSSSE; Center for Evaluation and Education Policy, 2012). The items “During the school year how often have you been picked on or bullied by other students?” and “Witnessed an act of bullying” were measured on a 4-point scale ranging from *1 or less days* to *8 or more days*. The bullying items were reverse-coded such that higher scores indicated lower levels of experiences with harassment by peers. The HSSSE has been used with a participant population that has included Native American students (Stevenson et al., 2021). The internal consistency was

acceptable at ( $\alpha = .60$ ). Given that this was an exploration into the concept of peer belonging in our population of interest, we believe that this is sufficient as a first step in moving this area of research forward. However, future studies must aim for more rigorous measurements of this construct.

## RESULTS

In each path model, results were controlled for gender and age. Table 1 presents basic descriptive statistics.

**Table 1**  
***Demographics of study participants and descriptive statistics for ethnic identity development, self-esteem, and peer belonging***

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
Ethnic Racial Identity	315	3.5	0.74	1	5
Self Esteem	308	3.63	0.73	1	5
Peer Belonging	311	3.3	0.77	1	5

*Note.* Missing data was not included in calculating individual mean scores.

### Confirmatory Factor Analysis

ERI, peer belonging, and self-esteem were treated as latent variables to explore the fit of the items used to measure them. In the initial model where all original items for the three measures were included, we found room for improvement in our fit indices:  $\chi^2 = 601.924$ ,  $p = .000$ ; RMSEA = .08; CFI = .84; TLI = .82; SRMR = .08. Informed by previous scholarly work on the limits of the RSES scale in capturing self-esteem as a unidimensional construct (Salerno et al., 2017), we reanalyzed our data by considering a bifactor approach to the scale. In this model, and directly guided by Salerno et al.'s findings, self-esteem was considered as one general latent construct that included two method factors: negatively and positively worded items (See Table 2 for self-esteem item correlations). Enabling this bifactor model significantly improved our fit indices:  $\chi^2 = 302.671$ ,  $p = .000$ ; RMSEA = .05; CFI = .96; TLI = .95; SRMR = .04. In order to further explore the robustness of the RSES as a measure of self-esteem for this current study population, we assessed residual correlations, which did not improve the model.

**Table 2**  
**Correlations of items on Self Esteem Scale**

Variable	1	2 <sup>+</sup>	3	4	5 <sup>+</sup>	6 <sup>+</sup>	7	8 <sup>+</sup>	9 <sup>+</sup>	10
1. SE1	—									
2. SE2 <sup>+</sup>	0.34***	—								
3. SE3	0.60***	0.31***	—							
4. SE4	0.43***	0.20***	0.55***	—						
5. SE5 <sup>+</sup>	0.34***	0.50***	0.34***	0.30***	—					
6. SE6 <sup>+</sup>	0.28***	0.61***	0.33***	0.26***	0.61***	—				
7. SE7	0.40***	0.24***	0.49***	0.40***	0.24***	0.17*	—			
8. SE8 <sup>+</sup>	0.30***	0.40***	0.25***	0.24***	0.46***	0.50***	0.04	—		
9. SE9 <sup>+</sup>	0.41***	0.49***	0.44***	0.43***	0.54***	0.59***	0.25***	0.48***	—	
10. SE10	0.58***	0.45***	0.55***	0.47***	0.42***	0.37***	0.43***	0.42***	0.50***	—

Note. <sup>+</sup>Negatively worded items.

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

### Path Analyses

Through structural equation modeling (SEM), we explored the role of peer belonging as one mechanism through which ERI development impacts self-esteem. Fitting a model through which peer belonging served as a mediator between ERI and self-esteem (see Figure 1 for path models and Table 3 for coefficients) demonstrated good fit indices:  $\chi^2 = 349.291$ ,  $p < .001$ ; RMSEA = .05; CFI = .93; TLI = .92; SRMR = .05. The direct effect between ERI and self-esteem suggested a positive association such that a higher score on the measure of ERI predicted a higher score on the RSES ( $\beta = .31$ ,  $p = .07$ ), although this did not reach statistical significance. Further, the direct effects between ERI and peer belonging ( $\beta = .45$ ,  $p < .001$ ) and peer belonging and self-esteem ( $\beta = .49$ ,  $p < .001$ ) both indicated positive associations such that ERI predicted peer belonging and peer belonging predicted self-esteem. The significant indirect effect of peer belonging elucidated its role in mediating the total effect of ERI on self-esteem (total effect = .54,  $p = .002$ ; indirect effect = .2=2,  $p < .001$ ). These paths were all controlling for the effects of gender and age. Of note, gender was a significant predictor of peer belonging ( $\beta = -.53$ ,  $p < .001$ ) suggesting an inverse association such that being a boy (1) predicted higher levels of reported peer belonging than girls (2). In fact, an independent sample  $t$ -test suggests that boys reported higher levels of peer belonging ( $M = 3.29$ ) in comparison to girls ( $M = 1.5$ ),  $t(532.4) = 35.1$ ,  $p < .001$ .

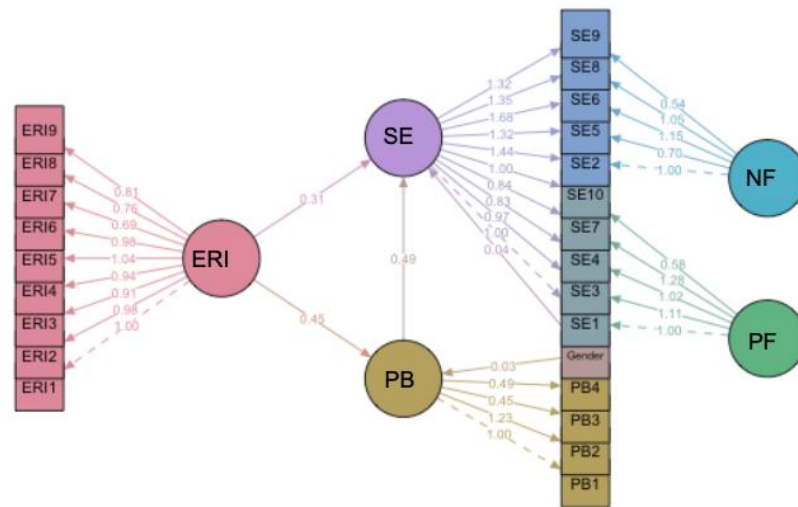
**Table 3**  
**Standardized direct, total, and indirect effects for structural model predicting self-esteem**

Pathway	Direct Effect	Total Effect	Indirect Effect
ERI → peer belonging	0.45**	—	—
Peer belonging → self-esteem	0.49**	—	—
ERI → peer belonging → self-esteem	0.31	0.54**	0.22**

Note. ERI = ethnic racial identity

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

**Figure 1. Structural Equation Model of Ethnic Identity Development Predicting Self-esteem, and the Mediatorial Role of Peer Belonging**



Note. ERI = Ethnic Racial Identity; PB = Peer Belonging; SE = Self-Esteem; NF = Negative Factor; PF = Positive Factor. ERI1-6 from the MEIM and ER7-9 from the Racial Centrality Dimension of MIBM. PB 1-2 from PSSM; PB3 and PB4 from HSSSE. Self Esteem items correspond to item numbers on the RSES.

## DISCUSSION

Driven by the developmental salience of peer relationships, Native students' perceptions about the relevant role of their peers in navigating their ERI, and appreciation for the central role of relational constructs within Indigenous groups (Tachine et al., 2017), peer belonging was chosen as a potential mediator between ERI and self-esteem.

First, a CFA model substantiated the use of two items capturing the role of peers in school belonging as well as two items measuring bullying exposure to assess the overall sense of peer belonging as a latent construct. As discussed previously, measuring the concept of self-esteem with Native Americans requires a critical consideration of whether the items can actually capture how individuals perceive their sense of self. While the RSES is often noted as the most commonly utilized measure of self-esteem (Gómez-Lugo et al., 2016) and a good number of studies focusing on Native American adolescents' mental health and psychological well-being have indeed employed this scale (Newman, 2005; Scott & Langhorne, 2012; Tuitt et al., 2019), our results join forces with the body of literature pointing to the scale's potential measurement limitations (Huang & Dong, 2012; Salerno, et al., 2017). Specifically, our results are in line with scholars who recommend against the use of total mean scores on the RSES as an indication of global self-esteem. Instead, we find support for the idea that positively and negatively worded items must be taken as two distinct factors to robustly measure this construct. This, however, raises questions regarding the psychological processes underpinning the disparate interpretations of positively and negatively worded items, specifically among Native American students (Hussain et al., 2018). While previous works establish the need to make this distinction when measuring self-esteem in many groups, we contend that self-related measurement tools, such as the RSES, must be especially astute and nuanced due to the potential distinctions of how the concept of self is socialized among Native Americans.

As discussed in the opening comments of this study, previous scholarship has urged researchers to avoid canonizing a single framework for how individuals understand their sense of self and instead encouraged recognizing the socially interdependent ways through which Native American people may understand their individuality (Holm et al., 2003). This scholarship extends to the measurement of psychological self among Native American communities. The framework proposed by Walls and colleagues (2019) provides a structure through which the debate between using "tailored vs. common" (p.3) social behavioral measurement tools can be organized. The



authors argue that in the outermost layer of their model lies the common processes involved in the design of measurement tools within social behavioral sciences (the Measurement Development Cycle), spanning conceptualization, operationalization, implementation, and interpretation. The center of this model locates the potential levels of adaptations depending on the specific recipient group (e.g., all Native American people vs. members of a specific tribe). These two layers are connected through the bridging process of community-research partnerships. Overall, researchers must explore whether the tasks involved in each measurement development stage, such as conceptualization of measures, are in harmony with the specific population of interest. When not, they must be tailored.

Informed by this framework, measurements of self-related constructs first have to determine whether a specific construct, such as self-esteem, is relevant to the specific population of interest, such as a diverse group of Native American students attending a tribal high school. The CFA of the RSES in this study suggests that measuring the idea of self-esteem may be developmentally salient for this community, and therefore no tailoring is needed at the conceptualization level. However, the operationalization stage requires changes that can reflect the pertinent domains involved in self-esteem processes for Native American students. Our results suggest that the core processes through which participants may have constructed their sense of self could be fundamentally centered on an overall sense of connectedness to their peer collectives, rather than rely on individual introspection or social comparisons. While the use of the RSES in this study provided valuable insight into the mechanisms that impact self-esteem, we acknowledge the need for employing more comprehensive tools in the future; ones that perhaps include measures of self-esteem in relation to others.

Second, and in line with previous literature, path analyses supported the association between ERI and self-esteem among our participants. Moreover, our analyses demonstrated that one reason adolescents with a more solidly developed ERI might experience greater self-esteem is that they are able to perceive higher levels of affiliation and belonging with their peers in school. This can be gleaned from our significant indirect effects between ERI and self-esteem through peer belonging. Higher levels of ethnic exploration, belonging, and racial centrality may be particularly relevant to experiences with peer belonging and self-esteem among our participants in light of their unique sociohistorical contexts. Indigenous scholarship explicating psychological functioning among Native American populations situates individual development between two levels: the macrosystem capturing ethnocultural values such as relationality, and the microsystem

capturing the reciprocal patterns between individuals and their environment (Fish et al., 2022). Our findings are in line with these models as we find that Native American students' well-being in this study, measured through self-esteem, is a function of the extent to which they espouse their ethnocultural beliefs and practices (ERI), as well as their relationships with their peers (peer belonging).

It is common for adolescents in the current study to be socialized to respect and value individuals who are committed to their cultural beliefs (Doery et al., 2023; Stumblingbear-Riddle & Romans, 2012; Wexler, 2009). Students who report high levels of cultural and ERI exploration, belonging, and centrality are likely students who engage in cultural activities at community gatherings such as honor ceremonies, drumming, or dancing. They may hold specific social privileges due to their participation in these activities, which is noticed by their peer groups. As such, the individuals with higher levels of ERI perceive their peers as more welcoming and accepting of who they are, which in turn impacts their self-esteem. Importantly, the way students interact with high ERI students is independent of their own ERI levels because adolescents are generally socialized within family and community structures to respect individuals who are connected to their traditions.

The perception of belonging to peer groups may also be important for members of this community due to potential social isolation associated with high rates of adverse childhood experiences (Brockie et al., 2015; Walls et al., 2022). Peer groups may be providing a safety net wherein adolescents feel the sense of safety and support that is vital for their development. In the words of the young man quoted at the beginning of the study by Hosseini et al. (2018), relationship dynamics between peers can enable adolescents to remain "sane" in the midst of challenges at school and beyond. This points to the powerful potential of peers in fostering well-being at both academic and non-academic levels.

### **Peer Belonging and Gender**

Importantly, our results provide preliminary support for the idea that among our participant population, males feel a stronger sense of belonging to their peer networks. Empirical explorations into the gendered experiences of Native American students' peer belonging in schools is scarce. However, among ethnically diverse students, meta-analyses and longitudinal studies of general school belonging suggest that girls typically report higher levels of belongingness (Allen et al.

2018; Neel & Fulgini, 2013). Furthermore, girls either tend to report higher levels of peer belonging (Newman et al., 2007) or both girls and boys report that peer belonging matters (Uslu & Gizir, 2017). Given these trends, our findings suggest that among our participants gender may play a different role in shaping their peer experiences. The body of literature on gendered experiences within educational peer groups is inconclusive. Some studies suggest that girls' emotional well-being may be especially prone to experiences with peer adversity such as peer rejection (Skymba et al., 2022). On the other hand, girls also report higher resistance to general peer influence when engaging in neutral and delinquent behaviors (Sumter et al., 2009). These disparate affective and behavioral findings may be explained by the specific impact of sociocultural contexts. In our study context, for example, girls' lives may be more intertwined with and influenced by interpersonal peer relationships than boys. As such, the day-to-day challenges that girls experience within their friend groups, such as romantic triangles or bullying, may play a role in hindering their sense of peer belonging. Alternatively, boys' higher levels of peer belonging may be explained by greater opportunities for involvement in athletic programs which could guide them towards their peer groups in school. Future studies must explore these patterns further to determine whether girls experience low levels of peer belonging or boys experience a particularly robust connection with their friends at school. It can be especially imperative to explore the specific experiences of Native American girls in this particular setting to understand the impediments to building close ties within peer networks.

### **Study Strengths**

A primary strength of this project is that it was uniquely situated to explore the concept of peer belonging among Native adolescents. The rich data obtained in this study facilitated learning about mechanisms of adolescent development in an acutely understudied group, namely Native adolescents living on reservations (Hawkins et al., 2022). We place our findings within a larger body of scholarship that actively seeks to address the gaps in knowledge regarding the sociocultural, historical, and political diversity among diverse Native American communities (O'Keefe et al., 2021). By focusing on the experiences of Native adolescents attending a reservation high school, we seek to encourage further explorations into the well-being of youth in similar understudied contexts nationwide.

Even though there have been a number of insightful scholarly contributions about the role of extended families in Native adolescent development (e.g., Christensen & Manson, 2001; Gobert

& Le, 2015; Joe, 1994), scant attention has been directed to the role of peer relationships within the field of Native American child and adolescent mental health. The current study expands this area by exploring a different and often-overlooked concept, namely peer relationships and belonging.

Another strength of our study was that we chose the concept of peer belonging as informed by qualitative data from the same study population, thus exploring mechanisms that are motivated by the lived experiences of those it seeks to study. In other words, instead of assuming mechanisms that can explain psychological outcomes, we used the insights provided by this participant population to identify potential mediators. This approach is in line with other scholarship that emphasizes the integral role of community-based participatory approaches with Indigenous communities to center their voices in guiding the direction of research questions and hypotheses (O’Keefe et al., 2021; Levac et al., 2019). This strength is especially important for the study of Native adolescents considering recommendations by Indigenous scholars to challenge Western hegemonic ideas around psychological functioning.

### **Implications**

An implication of our results, which stress the significance of Native adolescents experiencing peer belonging, is the need for increased opportunities for social interaction. Due to the challenges many families endure in order to meet their adolescents’ needs, the power of peer groups as a valuable source for fostering resilience must be recognized. Further, the remoteness and considerable geographic dispersion between homes on many reservations situates schools as some of the few public spaces within which Native American adolescents are able to socialize with their peers. As such, schools must recognize their affordances in facilitating opportunities through which students can organize and support one another.

### **LIMITATIONS AND FUTURE DIRECTIONS**

Our results were able to provide rich information regarding the experiences of Native adolescents from one reservation school who navigate relatively homogeneous peer groups embedded within the larger off-reservation social context that actively discriminates against them. We were able to provide support for the potential benefits of ethnically similar peer groups for adolescents living in similar circumstances. This study can be augmented through future

explorations of these patterns in different sociocultural contexts with diverse Native American urban, rural, and reservation groups.

Future research on this topic must explore three areas. First, researchers must explore how the diverse sociocultural contexts that Native adolescents navigate, such as other reservation settings or border town and urban communities, can impact the rates of peer belongingness and its role as a mediator between ERI and self-esteem. A robust body of evidence suggests that increased ethnic and racial diversity in peer groups is correlated with improved social competencies (Douglass et al., 2016; Williams & Hamm, 2018) for adolescents in more diverse communities than in our sample. One future area of exploration is therefore whether increased diversity in the peer networks that Native American youth experience can impact how peer belonging mediates their ERI development and self-esteem. We postulate that specific contextual factors in our sample, such as limited opportunities for engaging in person with peers outside of school, increase the power of the link between peer belonging and self-esteem when compared with individuals in other social contexts.

Second, informed by Phinney and Chavira's (1992) arguments regarding the reciprocal directionality of ERI and self-esteem, future studies must consider whether students with higher self-esteem are better able to function within their peer groups and are thus more likely to strengthen their ERI. Testing the directions of our hypothesized direct and indirect effects in this study was limited by the cross-sectional nature of our data, and future studies must explore other potential directions of effects using longitudinal data to further explore the role of peer belonging as a mediator. We also recognize that the subpar internal consistency of our peer belonging index limits the extent to which we can confidently assess this construct among this population. Our results provide preliminary support for the developmental and sociocultural relevance of this factor for Native American adolescents, and future scholarship must create rigorous measurement tools that can capture the nuances of how Native adolescents interact with their peers in school settings.

Third, future studies must critically consider measurement tools for capturing psychological outcomes—specifically those related to self-constructs—among diverse groups of Native Americans. Considering the group's beliefs and values centered on interdependence, self-esteem must be measured in light of the emphasis placed upon understanding the self in relation to others. Future works must explore how a shift in framing and capturing constructs such as self-esteem in more holistic ways can impact the significance of ERI and peer belonging as predictors of psychological well-being.

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