

## The Relationship between Indigenous Language and Health Outcomes

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Background: Indigenous languages are in decline and this loss threatens the balance and well-being of Indigenous communities. Indigenous language is not merely a vehicle to communicate, but incorporates worldview, values, and teachings that ground individuals to their environment.<sup>1</sup> Cultural identity and participation are markers of well-being for Indigenous youth and adults, especially in the context of settler-colonialism.<sup>2-7</sup> Six cultural protective factors have been found to relate to positive health within Indigenous communities including traditional foods, traditional activities, traditional medicine, spirituality, land, and language<sup>8</sup>. However, very little research around Indigenous language use and health exists.<sup>8,9</sup>

Method: This project sought to learn about the health experiences of Indigenous adults who participate in the Little Cherokee Seeds language immersion program. Measures of physical, mental, social, cultural health were incorporated into an online survey that is delivered every 6 months, starting with baseline for three total data collection periods. Participants included 5 mothers with an average of 2.5 children. Forty percent reported their highest educational attainment was high school/GED while the remaining (60%) reported taking some college courses. All were citizens of the Cherokee Nation and grew up on the Cherokee Nation reservation. All reported having a grandparent who was a fluent speaker, but none had a parent who is a fluent speaker.

Analysis: Descriptive analyses were conducted for all study variables. To assess the change in participant outcomes between the collection periods (T1- T3), means were compared. We were unable to do significance testing given the small number of participants.

Results: All domains of health improved from either T1-T2 or T1-T3. Language comprehension and speaking increased, as did tribal connection, identity, values, lifeways, and foods. Social support, life satisfaction, parenting self-efficacy, and positive mental health also improved.

Conclusion: This study represents an important and requested step<sup>8,9</sup> in learning about the relationship between Indigenous language and health. While this sample size is low, health trends clearly improve throughout the program suggesting the healing benefits of Indigenous language use.<sup>10</sup> This is consistent with beliefs of Indigenous community members, as well as the increasing body of literature, on culture and health.<sup>10</sup> While challenging given the scarce resources to fund language programming,<sup>11,12</sup> additional studies with larger sample sizes may bring light to this topic further.

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