



Background*

- Alaska Native people experience important health disparities in both the physical and mental health domains, such as suicide, alcohol use disorders, and obesity.
- These disparities have common social determinants such as intergenerational trauma or rapid culture loss.
- Physical activity (PA) is associated with better physical and mental health, but most PA promotion programs do not capitalize on protective factors rooted in AN culture that have been shown to improve mental health outcomes.
- Sled dogs were a central part of many Alaska Native societies, including Inupiaq people, for centuries, but started to disappear from communities 70 years ago when they were replaced by mechanical devices, adding to the loss of language as well as loss of spiritual or other cultural practices and resources.
- The Center for Alaska Native Health Research (CANHR) has identified and developed measures for individual, family and community protective factors of suicide and alcohol use disorders (AUD) through a series of studies initiated by the People Awakening project. Initially, we will focus on the individual protective factors *awareness, self efficacy, communal mastery, wanting to be a role model, and giving.*
- In this project, we propose to develop a dogjoring program (skijoring in winter and dog packing or cani-hike in summer) combining cross country skiing or hiking and the use of sled dogs among the youth of *Anaktuvuk Pass*, and promoting both physical activity and the People Awakening protecting factors.

* Please ask for references handout



Conclusions/Next steps

- Although no data have been collected yet, we feel significant progress has been made towards achieving our expected outcomes in the little time since our first visit in December, in terms of community engagement and program development.
- Our data collection will occur in April and we anticipate to process, analyze and disseminate those data by the end of this grant cycle (July 31, 2018).
- At this point we feel that we need more development time before submitting a full pilot project and we will therefore apply for a development project extension.
- The additional expected outcomes of that proposal will be:
 - The improvement of the curriculum, particularly to incorporate the promotion of the People Awakening projecting factors.
 - The development of the psychometric measures. In particular, adaptation of existing measures will be needed for cultural adequacy and understanding of questions by the youngest participants (8-14).
 - The evaluation of our ability to measure change. This will be done by assessing PA and psycho-social outcomes before and after the dogjoring program activities of March-April 2019.

Methods

- Community engagement* is an ongoing process using Community Based Participatory Research Methods. A community steering committee is the main interface between the research team and the community members, both guiding strategic decisions about the project, and overseeing its ethical adequacy.
- Program development* includes the following components:
 - A school curriculum with both in school classes and outdoor skjoring activities is being developed by a group including a veterinarian, two teachers, a ski instructor and the PI.
 - Outdoors after school dogjoring activities promoting the use of local dogs as well as dogs brought from outside, as well as intergenerational contacts between the youth and other community members.
 The activities will be designed to reinforce as many as possible of the People Awakening protecting factors, e.g., self efficacy or wanting to be a role model.
- Outcome assessments* will include both physical and mental outcome measures:
 - Demographic and anthropometric measures including BMI.
 - Accelerometry PA and sleep assessment using Actigraph accelerometers.
 - Psychometric survey including Alaska Native specific measures of protective factors of suicide and AUD, connectedness, reasons for life and life satisfaction.
- Process assessment* will include a CBPR satisfaction survey for adults and a dogjoring program satisfaction survey for youth participants. In addition, the research team will work with CTRP's evaluation core to develop other evaluation metrics during the dissemination phase (late spring 2018).

Outcomes

- The overall *expected outcomes* of the project are the *successful development of a dogjoring program*, and a proof of concept of how dogjoring could improve an existing PA program in the community. These outcomes are expected to advance the knowledge needed to develop more efficient and more culturally relevant PA programs in AN communities that address both physical and mental health outcomes, contributing to the reduction of important health disparities.
- Four months into the implementation of the project, *achieved outcomes* during three visits to the community include:
 - Community engagement including three community steering committee meetings, recruitment of two teachers for curriculum development, a community research assistant, and a cinematographer from the community.
 - Recruitment of a veterinarian from UAF's VetMed department to integrate basic dog care into the curriculum and of an Alaska Native musher/teacher from a nearby community to provide sled dogs specific intergenerational contact with the youth.
 - A dry run of accelerometer data collection with three youth in the community and piloting of using local dogs provided by community members for skjoring activities.
 - A week-long visit to the community is planned for April 16-23 to conduct the in-school administration of our curriculum in development, ski and skjoring field activities, and demographic, anthropometric, accelerometry and process evaluation data collection (Our target recruitment is 40 youth 8-18 years old).

