

Alaska Native Elders' Perspectives on Physical Activity and Successful Aging*

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RÉSUMÉ

L'activité physique est généralement considérée comme un facteur contribuant de façon significative au vieillissement réussi d'une personne. Certains groupes n'ont cependant pas été suffisamment représentés dans les discussions sur l'activité physique et le vieillissement, particulièrement ceux provenant d'horizons culturels différents. Dans cet article, nous explorons comment les aînés autochtones de l'Alaska perçoivent le rôle de l'activité physique au cours de leur vieillissement et la contribution de l'activité physique au vieillissement réussi. Les entretiens semi-structurés menés auprès de 41 aînés ont montré que l'activité physique n'était pas seulement perçue comme une responsabilité personnelle en vue du maintien d'une bonne santé lors du vieillissement, mais aussi comme un moyen de résister à l'opinion répandue voulant que les personnes âgées soient dans une phase de déclin. Pour ces aînés, être physiquement actif, peu importe l'âge, était vu comme un moyen pour améliorer ou maintenir leur état physique, mental, émotionnel ou spirituel, et permettrait de participer aux activités de subsistance qui sont rattachées à leur culture et aux rôles ancestraux qui leur sont reconnus.

ABSTRACT

Physical activity is widely considered to be a significant contributing factor to how "successfully" one ages. There are, however, certain groups whose voices have not been widely heard in discussions around physical activity and aging, particularly those from diverse cultural backgrounds. In this research, we explored how Alaska Native Elders perceive the role of physical activity as they age and its contribution to successful aging. Based on semi-structured interviews with 41 Elders, the results show that engaging in physical activity was not just seen as a personal responsibility to maintain health and age successfully, but also as a way to resist Western society's dominant view of older adults as deteriorating and declining by being physically active regardless of age; to improve or maintain their physical, mental, emotional, and spiritual health; and/or to enable them to continue participating in subsistence activities that are rooted in their culture and traditional roles as Elders.

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Introduction

Between 2004 and 2014, the state of Alaska experienced a 61.5 per cent increase in the age 65 years and older population (Alaska Commission on Aging, 2016). Additionally, in 2016 Alaska had the highest population growth rate of those aged 65 and older in the United States for the seventh year in a row (Alaska Commission on Aging, 2016). Similar to the Indigenous population in Canada (O'Donnell, Wendt, & the National Association of Friendship Centres, 2017), the Indigenous older adult population in Alaska, referred to as Alaska Native Elders in this article, is also increasing (Lewis, 2013). In addition to this demographic shift, the realities of Alaska Native older adults are changing. Those living in rural and remote communities are experiencing both the rapid outmigration of young family members and the ever-increasing costs of living (Lewis, 2013). All of these factors influence the experiences, needs, and traditional roles of Alaska Native Elders and, therefore, the need to understand their experiences with aging and how they can best be supported to successfully age, from their own perspectives.

This research was part of the first phase of a larger three-year study (2015–2018) that was focused on exploring a northwestern Alaska Indigenous understanding of successful aging and determining Alaska Indigenous Elders' needs for aging well and in place. The overarching goal of the larger study was to support Elders in living their remaining years within their communities and in contributing to the health and well-being of their communities. As the project progressed, it became apparent to the research team that physical activity was a common component that kept emerging throughout our data collection. Although some authors have explored aging well from the perspectives of Indigenous adults in North America (Collings, 2001; Hopkins, Kwachka, Lardon, & Mohatt, 2007; Lewis, 2011), few researchers have specifically focused on physical activity. Consequently, we explored the topic of physical activity and successful aging further for multiple reasons: (a) its prevalence in our research and thus, its importance to the participants in the research; (b) the dominance of physical activity on local, national, and international policy agendas targeting older adults; and (c) the fact that physical activity related to aging well is often conceptualized through a Western lens that may not be relevant to those from non-Western cultures (Brooks-Cleator & Giles, 2016a; Wright-St Clair et al., 2017).

The specific focus of this article addresses the question, “How do Alaska Native Elders perceive the role of physical activity as they age, especially given the widely recognized role of physical activity in successful aging?” For this research, *physical activity* is

broadly understood as being any “movement that increases heart rate and breathing [and] any bodily movement produced by skeletal muscles that requires energy expenditure” (Canadian Society for Exercise Physiology, 2017, p. 14).

Understanding the role of physical activity in successful aging will help to inform the development of community services and programs – appropriately reflective of culturally meaningful activities – that support Alaska Native Elders in being physically active.

Background

Successful aging is a concept studied within the aging-well literature in the effort to understand what it means to achieve “good” old age. It became a popular concept with the publication of Rowe and Kahn's (1987) article in *Science*. Prior to this publication, decline and disease in advanced age were accepted as the natural and inevitable effects of aging; however, Rowe and Kahn (1987) argued they were actually effects of disease. From their perspective, individuals who aged successfully would have (a) a low probability of disease and disease-related disability, (b) high cognitive and physical functional capacity, and (c) active engagement with life (Rowe & Kahn, 1997).

Physical activity is widely considered to be a significant contributing factor to how “successfully” one ages given its many physiological and psychological benefits, including improved cardiovascular health, improved bone health, reduced risk of falls, improved cognitive function, and improved mental health (King & King, 2010; Menec, 2003; Taylor et al., 2004). Thus, the general population, policy makers, and health care providers perceive that older adults need to engage in physical activity because of its many health benefits and its ability to improve physical and cognitive function (Tulle & Phoenix, 2015). Consequently, Western society has accepted the neoliberal idea that older adults need to “take individual responsibility for engaging in ‘active aging’ in order to ‘age well’” (Pike, 2015, p. 21), which is well-suited for Western understandings of successful aging (Jette & Vertinsky, 2015). There are, however, certain groups whose voices have not been widely heard in discussions around physical activity and aging, particularly those from diverse cultural backgrounds (Brooks-Cleator & Giles, 2016a; Pike, 2015).

Additionally, Western understandings of physical activity for older adults often lack consideration of social location and cultural nuance that influence the types of physical activities in which older adults participate (Jette & Vertinsky, 2015). For example, Jette and Vertinsky (2015) found that older Chinese women

participated in physical activity not because of a personal responsibility to maintain their health; rather, they did it to pursue happiness and life balance. By not taking into account non-Western perspectives of physical activity and aging, researchers and those involved in physical activity policy and practice risk further marginalization of groups whose perspectives have been historically disregarded, such as Indigenous peoples (Brooks-Cleator & Giles, 2016a; Brooks-Cleator & Giles, 2016b; Forsyth, 2007; Giles, Castleden, & Baker, 2010; Paraschak, 1998).

For Indigenous older adults in North America, there is a dearth of research that explores their perspectives on physical activity in older age and how being active relates to their experience of aging well. One of the few available examples is Collings' (2001) study with 38 Inuit from Ulukhaktok (formerly known as Holman) in the Northwest Territories. In that research, some of the findings pointed to the influence of physical activity on aging well. The participants, particularly men, described the importance of exercising in order to continue being able to hunt and fish and to pass these skills and knowledge on to younger generations (Collings, 2001). They also discussed how staying active was a way to keep the body from wearing out in advanced age (Collings, 2001). Although it is promising that some researchers have begun to explore the relationship between physical activity and aging well from the perspectives of Indigenous peoples, it cannot be assumed that the findings can be applied across all Indigenous cultures, as there is much diversity between and within groups of Indigenous peoples. Our research further adds to this discussion but from the perspectives of Alaska Native Elders in northwestern Alaska. As Pike (2015) suggested, the subjective experiences that influence the lifestyle choices – especially those choices related to physical activity – of older adults from diverse cultural backgrounds could inform future policy and practice in making more inclusive, appropriate, and relevant provisions for older adults' physical activity.

Similarly, since Rowe and Kahn's (1987) initial publication on successful aging, there have been many critiques of their research and, thus, also many modifications and new, proposed definitions, but there still is no agreed-upon definition of what it means to age successfully. A general understanding among many gerontologists is that successful aging should be defined by older adults themselves (Dillaway & Byrnes, 2009; Martinson & Berridge, 2015; Phelan, Anderson, LaCroix, & Larson, 2004). Taking this further, some researchers have argued that there needs to be more culturally based definitions of successful aging rather than just those based on Western, biomedical knowledge systems (Lewis, 2011; Martinson & Berridge,

2015; Torres, 1999). Torres (1999) argued that more culture-specific theories of aging are needed that challenge dominant ethnocentric understandings of successful aging.

Clearly missing from the dominant concept of successful aging are non-Western perspectives of aging and the perspectives of those who are experiencing older age. Undoubtedly, older adults deal with physical health issues as they age, but there are also many social and cultural factors, such as remaining socially connected to their communities or potentially transitioning into new roles (e.g., becoming an Elder), that are often not addressed with respect to successful aging. Although the concept of successful aging focuses on equating successful old age to avoidance of decline, deterioration, illness, and dependence on others, there are other perspectives, particularly those of Indigenous older adults, that also consider emotional well-being, community engagement, intergenerational communication, sharing wisdom, and spirituality as important aspects of successful aging (Lewis, 2011; Collings, 2001).

The extent of how successfully one ages is subjective, and all older adults have a different opinion on what is "good" old age and what it means to be elderly, which is strongly influenced by their history and culture (Lewis 2014). For example, this subjectivity and influence of history and culture are evidenced in subsistence activities and the material and social changes experienced by the current generation of Indigenous older adults as a result of colonization and Western influence (Brooks-Cleator & Giles, 2016a). Subsistence activities are a significant form of physical activity for Indigenous peoples living in rural and remote communities in northwestern Alaska and include hunting, fishing, and berry-picking in order to live off of the land; and for some, these activities are a source of income. Changes that Indigenous communities have faced in the North include new technology for subsistence, such as snowmobiles and outboard engine boats, and changing economies that shift the source and significance of income within smaller communities (Collings, 2001), which have implications for this form of physical activity, such as how people hunt and fish, the knowledge related to subsistence that is passed down to future generations, and community members' opportunities to participate in subsistence activities (Fienup-Riordan, 2001).

Given an Alaska Native Elder's lifestyle that has historically consisted mainly of subsistence activities, it is important that researchers explore the link between physical activity and aging well. The meanings of aging and successful aging, and the role of physical activity in successful aging, are not universally accepted, nor can a Western understanding be

homogeneously applied to all older adults. Consequently, it is important to engage in dialogue with older adults from diverse cultural perspectives, particularly those who have historically had limited input (with the exception of a few researchers) in gerontological research (i.e., Indigenous Elders).

Methodology

To understand aging from the perspectives of Alaska Native Elders, we used a community-based participatory research (CBPR) methodology, as it allows for a collaborative and participant-led approach (Wallerstein & Duran, 2006). Within a CBPR framework, the research is directed by the community instead of solely by the researcher. Further, the goal of those who employ CBPR is research that results in action, social transformation, and positive change (Baum, MacDougall, & Smith, 2006; Darroch & Giles, 2014; Wallerstein & Duran, 2006), such as policy change, program development, allocation of funds, community empowerment and mobilization, and so on. Additionally, this methodology encourages researchers to be critically reflexive of their work and the research process. A CBPR approach invites participants to share their voices where they traditionally have had limited input, which is particularly important for this research with Indigenous Elders given their history with colonialism and the historical lack of consultation throughout research with Indigenous populations (Smith, 1999). There are eight key principles of CBPR: (a) recognizes community as a unit of identity; (b) builds on strengths and resources within the community; (c) facilitates collaborative partnerships in all phases of the research; (d) integrates knowledge and action for mutual benefit of all partners; (e) promotes co-learning and empowering processes that attends to social inequalities; (f) involves a cyclical and iterative process; (g) addresses holistic well-being and the social determinants of health; and (h) disseminates findings and knowledge gained to all partners (Israel, Schulz, Parker, & Becker, 1998). These principles can be reviewed in other publications by the second author (JPL) (Lewis & Boyd, 2012) as well as work by Minkler and Wallerstein (2008).

The CBPR approach began to develop in this research after JPL had conducted research in the southwest region of Alaska that addressed successful aging with Alaska Native Elders (Lewis, 2011; Lewis, 2014). Those working with Elders in the Norton Sound southern sub-region of northwestern Alaska approached him about conducting similar research in their region. Initially, they were interested in conducting a year-long mixed methods Elder needs assessment in this region to determine how they could better support the needs

of Elders in northwestern Alaska, which then led to the current 3-year long research project. Led by JPL in partnership with the hub community, the research team conducted this study in the five sub-regional communities where JPL has been engaged in research for eight years. To ensure this was a collaborative and participatory project, JPL worked with Tribal Councils in each community to hire a local Elder Care Coordinator who served as the key stakeholder for the project. The Elder Care Coordinators were an integral part of the research team to connect and build relationships with Elders in each community. The Elder Care Coordinators helped the research team form an Elder Advisory Committee, which included Elders from each of the five communities. In keeping with the principles of CBPR, the Elder Advisory Committee encouraged the research team to seek direction and input from Elders throughout the study to ensure a collaborative and participant-led approach (Kovach, 2009).

The purpose of the Elder Advisory Committee was to help mentor and guide the research team with the cultural adaptation of the interview questions, recruitment, data analyses, review of preliminary findings, and dissemination of the results. Establishing the Elder Advisory Committee was an important step in the research process, as we wanted to ensure that the research questions, interview questions, and research materials were reflective of the region and written in a language and tone that would be understood by Elders. Meetings were held with the Elder Advisory Committee three times throughout each year of the project and JPL continues to engage with each community regarding support for their Elders. Their feedback also guided the team on dissemination materials, including berry buckets with Elder quotes from the study, a sub-regional newsletter, and Elder calendars highlighting major themes and quotes from the study.

Methods

The Elder Care Coordinator also assisted in recruiting research participants through the use of purposive sampling (Marshall, 1996), which allowed us to recruit 41 Elders who fit the inclusion criteria for the research. The Elders that participated in the research were individuals who self-identified as an Alaska Native person, and who had been specifically recognized as Elders by their communities for their respected role as traditional knowledge keepers and sharers. Rather than following a Western definition of older adult, as age 65 or 67 or older, we use the term Elder “to differentiate between the Indigenous Elders of Alaska and those who are just considered elderly” (Lewis, 2014, p. 267), as not all older adults are Elders and Elders have a highly respected role in Alaska Native communities as traditional knowledge keepers and sharers.

Locally, in the Norton Sound southern sub-region of Alaska, where this study was conducted, Elders are traditionally viewed as role models and considered the cultural and spiritual leaders of their communities regardless of age (Norton Sound Regional Health Corporation, 2017), despite the minimum age requirement of 55 years to receive Elder Fund benefits as described by the Norton Sound Regional Health Corporation (2017). Accordingly, we relied on the Elder Care Coordinator and community members to define the Elders in each community and to identify potential participants who fit each community's definition of Elder. This approach removed our biases on who we considered an Elder; we recruited community-nominated Elders who were viewed as respected Elders and had achieved Eldership, regardless of age, disease or disease-related disability status, or health status.

The University of Alaska Anchorage, the Alaska Native Tribal Health Consortium Ethics Review committee, Norton Sound Health Corporation Ethics Committee, and each participating community tribal council approved this study and publication.

Data Collection

We adapted the explanatory model (EM) interview protocol of Kleinman (1980) to collect data in this study. Although the EM has been primarily used to study models of diseases cross-culturally, we used it to discover how Alaska Native Elders define successful aging. Fifteen questions covered topics such as how Alaska Native Elders defined successful aging, how their aging process affected their emotional, spiritual, and cognitive well-being, as well as what it meant to age poorly in their community, how they avoided poor aging, and how the participant maintained their health and well-being in a rural setting. The interview questions did not specifically ask about physical activity as we wanted to ask general, open-ended questions about successful aging and how the participants stayed healthy as they aged; we wanted to avoid asking leading questions.

After consulting with the Elder Advisory Committee, we determined that semi-structured interviews (Fontana & Frey, 2005) would be the most effective method of data collection. Using semi-structured interviews allowed us to focus on the participants' perspectives and experiences in relation to our research questions (Fontana & Frey, 2005), while also enabling us to ask follow up questions to further explore their perspectives on successful aging. The interviews were either held in Elders' homes, community centres, or Tribal Council offices, and the interviews ranged in length from 30 to 90 minutes. To protect the identity of the participants, each participant was

assigned a unique code to identify their transcripts. With participants' consent, all of the interviews were audio-recorded and then transcribed verbatim.

Demographics

Norton Sound Region

The Bering Strait region, where the study communities are located, has 9,917 residents, according to 2016 population estimates from the United States Census Bureau (2016). About 75 per cent identify as Alaska Natives from three distinct linguistic and cultural groups: Inupiat, Central Yup'ik, and Siberian Yupik (United States Census Bureau, 2016). The economies in the village are a hybrid of cash and subsistence. Many residents still live traditional lifestyles, and rely on the land, river, and sea for much of their food (Norton Sound Regional Health Corporation, 2017). Village Elders teach others subsistence gathering and preparation of traditional foods, cultural practices, and Alaska Native languages, which are important aspects of each community (Norton Sound Regional Health Corporation, 2017).

Participant Demographics

To address the research questions for this study, we interviewed 41 Elders (16 males and 25 females) from five communities in the Norton Sound southern sub-region of northwestern Alaska. The majority of participants (39) ranged in age from 60 to 89 years old. All of the Elders had lived in their communities for over 30 years. Fifteen identified English as their first language, two listed Inupiat and English, 10 listed Inupiat only, one listed Inupiat, one listed Inupiat and Yupik, 12 listed Yupik only, and one listed Yupik and English as their first language(s). Inupiat and Yupik are the languages spoken by Indigenous peoples in this region of Alaska. For education, 15 had completed high school, one graduated from college, four received an associate's degree, nine had completed some college courses, and 12 had not completed high school. Finally, the majority of Elders were either married (17) or widowed (16); three were divorced, two were separated, and three were single.

Analysis

All interview transcripts were uploaded to the qualitative data analysis software NVivo (<https://www.qsrinternational.com/nvivo/home>) and then analysed using thematic analysis (Braun & Clarke, 2006), which is one of the most common and foundational forms of analysis in qualitative health research (Green & Thorogood, 2004). To identify, analyse, and report patterns in the data, we used thematic analysis and served as active participants in the theme selection

process (Braun & Clarke, 2006). There are six steps involved in thematic analysis: (a) familiarizing oneself with the research data, (b) generating initial codes, (c) searching for themes, (d) reviewing themes, (e) defining and naming themes, and (f) producing the report (Braun & Clarke, 2006).

For the first step, all (four) members of the research team read through each of the transcripts to create memos with initial thoughts. Next, the first author (LB-C) coded the transcripts based on the research question related to physical activity and successful aging and consulted the second author (JPL) when any questions or inconsistencies arose. The following passage from one interview is an example of what was coded as “be happy with what you can do”:

And be thankful for what you CAN do now. Because tomorrow I might not be able to walk. Who knows? But I'm thankful for today that I still can walk. So be thankful for what you can [do] instead of moaning and groaning – why can't I do that – it's not gonna help you. (KOY17-5, personal communication, April 27, 2017)

Another initial code was “be active”, illustrated by the following quote: “Being active and eating well. Exercising. You don't have to exercise hard; just walk a little ways. And then it really helps even going upstairs and downstairs, and we did that with his leg and it makes a difference” (UNK-17-11, personal communication, July 10, 2017). There were numerous passages initially coded as “subsistence activities”, including the following:

I work hard. I'd get up early in the morning, 5:00. When I go to hunt whale I get up while they sleep. I get the whale. I mix gas. In my day 5 gallon gas only \$3.00. All the time I go out. I'd go out hunting, 120 miles myself, hunt caribou. (KOY17-1, personal communication, April 27, 2017)

Once all of the transcripts were coded, we met to review the codes and identified themes within the data. We then reviewed the themes to determine which codes fit with each theme and to ensure they accurately represented what was found within the data. Finally, we further refined the themes by naming and defining them, and found corresponding quotes within the interview transcripts. This approach allowed us to develop clear and concise themes which we presented to the Elder Advisory Committee to receive their feedback and ensure we were appropriately representing the perspectives of Elders in their five communities. We shared preliminary findings with the Elder Advisory Committee that included each theme, the corresponding definition, and examples of the themes within the data; we welcomed their input and recommendations and further refined the themes based on their feedback.

Results

Three main themes emerged in relation to the Elders' perceived role of physical activity in successful aging, which included (a) being physically active is important for successful aging; (b) being an Elder means being able to actively participate in subsistence activities and teach others subsistence, despite any physical limitations; and (c) being physically active regardless of age. Although we did analyse the themes to determine if there were differences between the male and female Elders, there were no significant differences within the data related to physical activity and successful aging. The following section provides context and quotes from the participants that illustrate the meaning of each theme.

Successful Aging and Physical Activity

Many of the Elders spoke about the importance of remaining physically active in order to age successfully, whether it was through participating in subsistence activities (e.g., hunting, fishing, or berry picking) or intentional exercise (e.g., going for walks in town or participating in an exercise program). Although the Elders recognized that both forms involved physical activity, they were done for different purposes. On the one hand, subsistence activities were a way to survive and provide for family and also to preserve their culture, as illustrated in the following quote: “We always survive on Native food. We've got to go out and hunt. My freezer is almost empty now. I've got a big freezer, it's outside and that way I'll have something to eat” (KOY17-1, personal communication, April 27, 2017). On the other hand, intentional exercise was a way to directly influence their physical health, as this Elder described: “You've got to be up and around. I get up first thing in the morning. I rub my hands. I rub my legs. I walk around for 15 minutes every morning. And my body get good. I've got to keep moving” (KOY17-1, personal communication, April 27, 2017).

Simply participating in subsistence activities was not viewed by the Elders as a way to get in their daily recommended exercise, but they were conscious of the physical demands of subsisting, which they felt contributed to successful aging. One Elder noted, “every spring, you will start – we start to gather off of the land and that's what keeps our Elders healthy” (STEB17-1, personal communication, May 1, 2017). Another Elder noted how, for her, participating in subsistence activities was part of aging successfully in that “as I grow older, I still love to fish and pick berries” (UNK-17-10, personal communication, July 10, 2017). The Elders also identified that engaging in intentional exercise contributed to successful aging. As one Elder stated, “If they see me walking, [they ask] ‘how come you're

walking?' [I say] 'I gotta walk so I can be strong' (KOY17-5, personal communication, April 27, 2017). Another discussed how "I always take my walks at nighttime before I go to bed, just to be healthier" (KOY17-8, personal communication, April 27, 2017). The Elders not only identified physical activity as a part of successful aging, it was also regarded as an integral part of being an Elder in their community.

Eldership and Actively Participating in Subsistence

While recognizing the physical demands of subsisting, the Elders – both men and women – also identified that teaching others was a means of actively participating in subsistence, which was an important aspect of Eldership. Some of the Elders were aware that, because of their physical limitations they perceived as being related to aging, they were unable to actively participate in subsistence tasks as well as they could when they were younger. As one Elder described it:

I just accept it as it comes. I know that I cannot do things that I used to be able to do and I've learned to kind of accept it. But boy, that doesn't mean that I have to like it. I would love to be able to go down to the river, chop a hole in the ice and fish. I'd love to be able to go to the berry patches when the berries come, but I can't do that anymore. (KOY17-7, personal communication, April 28, 2017)

Despite these limitations, they could still go out on the land and actively participate through teaching youth, family members, and others in the community about subsistence. One Elder summarized this by stating:

We'd go out hunting. I'd show them what to do. And because of my degradation in ability to do a lot of things out in the country, I'll still go out with them, especially during the summer and fall time, but basically I look at myself as just a supervisor. (KOY17-4, personal communication, April 28, 2017)

Although the act of subsisting was important to this Elder, as he became an Elder in his community being able to teach became one of the main priorities when subsisting. As one Elder noted:

But I lived in a home where we did a lot of subsisting, and I'm still doing that today. And I'm trying to pass it down too – my kids know about it. Now my grandkids, I'm trying to show them how to go get masu and sura [plants in northwestern Alaska] and make dried fish and smoked fish, and passing on my knowledge I got from my Dad. (KOY17-5, personal communication, April 27, 2017)

Another Elder described the important role of teaching subsisting when he stated:

We did things, just a lot of things together, and we subsisted together. And especially with us boys, our father was real important because he took a lot of time to teach us how to survive off of this land: how to hunt, how to be a hunter, and things that are expected of a man. (KOY17-4, personal communication, April 27, 2017)

Clearly, the ability to participate in and teach subsistence activities were key characteristics both of Eldership and of successful aging for many of the Elders who we interviewed; however, Elders also saw the role of physical activity as they aged as a way for them to resist the negative stereotypes associated with aging.

Being Physically Active Regardless of their Age

The Elders spoke about how they would specifically engage in certain activities in order to show that, regardless of their age, they could be physically active. Despite the dominant, Western stereotypes of physical decline and lack of physical strength accompanying older age, the Elders engaged in physical activity to counter these views. One Elder described doing things independently, rather than relying always on the help of others: "They can do things on their own, not depend on others to do it for them. Like me, I'm trying to age well by trying to do things on my own instead of asking for help all the time" (KOY17-5, personal communication, April 27, 2017).

Additionally, as one Elder discussed when asked how she felt about being seen as an Elder in her community:

Well, you get the doors opened for you and carry the box from the post office, even if it's light as a feather. [Chuckles] Stop and can't even take a walk and exercise – somebody picks you up, so you have to go out of town to exercise. (UNK17-11, personal communication, July 10, 2017)

For this Elder, although community members were being considerate by carrying boxes and driving her around the community due to her status as an Elder, which she described as being due to her older age, this was not what she wanted – regardless of her older age, she was capable and wanted to do these physically demanding activities to remain physically active and avoid decline. Another Elder shared a story about how he wanted to demonstrate that despite his age, when most people thought he could not do something, he could do just as much or more than the others who were going out hunting. He said:

Everybody was going out with snow machines and four-wheelers, and it was nice out. I didn't have a snow machine or a four-wheeler, but I wanted to get a caribou. So I told my wife I'm going to walk and get me a caribou. So that's what I did. I walked like this and I got a caribou that one day.

And we went out the next day and got another one. But we just wanted to, we wanted to talk about if I'm going to get old or age or get up on our years, and it could be – I told her it would be something if we can do that. And we can walk and get it and so tell a story to our grandchildren. And I think in four hours' time – it took us about four hours each day to walk and walk and get one. (SHAK17-2, personal communication, April 29, 2017)

For this Elder, he wanted to prove that regardless of his age, he could do these physically demanding activities others thought he could not do. One Elder emphasized the age of another Elder in the community who was still active: "Well, there's a[n] 80-year-old; she's still going out fishing" (UNK17-11, personal communication, July 10, 2017). She was impressed by what this Elder could still do at his/her age. Another Elder described how, regardless of her limitations that she described as being due to older age, she continued to be physically active by modifying her activities:

I can't mop my floor anymore. The only way I can get my floor clean is if I sit on my rear because I don't believe in mop and bucket. It doesn't do the job. I grew up scrubbing – scrubbing the floors and I can't do that on my knees anymore so I do it on my bottom. (KOY17-7, personal communication, April 27, 2017)

Although there are many negative stereotypes about decline in relation to aging bodies, these Elders engaged in physical activity specifically to counter these views.

Discussion

The purpose of this study was to understand how Alaska Native Elders in northwestern Alaska perceived the role of physical activity as they age, particularly as it related to successful aging. The results show how the Elders felt that being physically active, with physical activity being defined on their own terms, was important for successful aging, especially as it related to actively participating in subsistence activities. Furthermore, by being physically active in their later stages of life, the Elders were able to resist ageist societal views of older adults as deteriorating and in declining health. Our results suggest that for Alaska Native Elders, engaging in physical activity is done not only to improve or maintain their physical, mental, emotional, cultural, and spiritual health, but also to enable them to continue participating in subsistence activities. Therefore, in this article, we have demonstrated how physical activity for Alaska Native Elders is not solely for the purpose of pursuing physical health and avoidance of physical decline, which is often how it is reflected in Western health promotion discourses.

Resisting Ageist Beliefs

Authors have discussed the fixation in Western cultures with the notion of older adults' personal responsibility to engage in physical activity in order to counter the negative effects of aging and reduce the burden of the aging population on society (Jette & Vertinsky, 2015; Pike, 2015; Tulle & Phoenix, 2015). Ageist beliefs in Western society present older adults as a burden, as deteriorating individuals who face inevitable disability and decline, and as a socioeconomic risk to society (Pike, 2011). Through this research, we can see how the participants countered these views by describing how they remained active regardless of being in their later stage of life. They would do things independently, find alternate methods for doing physically demanding tasks, and be active beyond their, or their community's, expectations. Additionally, and of interest, was that while the participants were not necessarily engaging in physical activity because they felt a personal responsibility to maintain their individual health and wellness, they did continue to value being physically active so that they could contribute as Elders to their communities and families, as we describe below.

Role of Physical Activity in Successful Aging

For Elders in the Norton Sound southern sub-region of Alaska, physical activity did play a role in successful aging by Elders' being able to maintain, or improve, their physical health, but also their emotional, spiritual, and mental health. In comparison to the dominant biomedical model of successful aging that emphasizes the personal responsibility of older adults to engage in physical activity to maintain their health (Pike, 2015), our results indicated that physical activity helped Elders to age successfully in numerous ways. Similar to the women in Jette and Vertinsky's (2015) study, the Elders participated in physical activity for reasons more closely related to psychological and emotional well-being. For the Elders, intentional exercise, such as taking a walk in town, was understood as a health promotion tool to improve physical health and maintain physical function, which is similar to Western concepts of physical activity and successful aging; however, the Alaska Elders did this as a way to contribute and maintain their roles as Elders in the community, not because of a personal responsibility to maintain their health and wellness. The physical demands of being on the land engaging in subsistence activities were a large part of their understanding of what successful aging means to an Indigenous Elder, but so too was their ability to teach others about subsisting, which is similar to what other researchers have highlighted as being important to Indigenous older adults (Collings, 2001; Fienup-Riordan, 2001).

For the Elders in this research, aging successfully meant being able to take part in subsistence activities through teaching as well as the actual subsistence activities (e.g., hunting, fishing, gathering, arts and crafts), which also constituted a central part of their role as Elders in the community. This is similar to the findings from Collings' (2001) study; however, in contrast, we found that it was not mainly the men who described the significance of subsistence (Collings, 2001): it was both men and women, which is similar to the findings from other studies conducted with Alaska Native Elders that did not indicate any differences in definitions of successful aging between men and women (Lewis, 2011). The importance of teaching and sharing their knowledge about subsisting, whether they could actually directly participate or not (as one Elder described himself as being a "supervisor"), illustrates the significant link between being an Elder and teaching and sharing with younger generations, which is consistent with other literature related to successful aging with Indigenous older adults (Collings, 2001; Lewis, 2011). Physical activity, through participating in subsistence activities, for the Elders in this study was a way for them to contribute to their communities and families and maintain their productive roles as Elders, and thus, successfully age.

In relation to subsistence activities, physical activity contributed to aging successfully as it was a means for the Elders to (a) pursue happiness; (b) connect to their cultural values of subsistence; (c) prepare and consume traditional foods; (d) resist ageist stereotypes that depict them as weak or deteriorating; (e) connect to the land, their family, and youth where they can share meaningful experiences through teaching, sharing, and subsisting; (f) and maintain their health not only physically but also mentally, emotionally, and spiritually.

Implications

These experiences and perspectives of Alaska Native Elders are particularly important to consider given that health promotion policies and programs are often heavily grounded in Western concepts of physical activity that promote an anti-aging or health-related behaviour (Tulle, 2015). As discussed by Pike (2015), exploring these subjective experiences can help to make health promotion policy and practice more age-appropriate and culturally relevant. These efforts could also have an impact on how services and interventions are developed and delivered in rural communities in Alaska. Promoting intentional exercise as something to improve physical health and maintain physical function is still useful, but supporting and encouraging Elders to engage in subsistence activities

in the same way may not have the same result. Rather than encouraging the participation in subsistence activities as an individualistic, responsible health-promoting behaviour, given the numerous physical, emotional, spiritual, and mental health benefits of these subsistence activities, the most useful strategy may be to develop programs that support those Elders who may not have the opportunity to go out on the land.

Engaging in activities as much as they are able to would also help to reduce the Elders' fears of losing their independence, of no longer being able to provide for their family and community, and of becoming a burden on family. The results also highlight the importance of including Elders in discussions on policies and programs that directly impact them, as they are the ones with expert knowledge on their own experiences. As many authors have discussed, successful aging is understood in a very individualized, biomedical way (Jette & Vertinsky, 2015; Lewis 2011; Martinson & Berridge, 2015; Pike, 2015; Torres, 1999); however, by speaking with Elders from culturally diverse backgrounds, we can now better understand how physical activity as it relates to successful aging is more complex. It is about sharing, teaching, learning, and connecting to one's culture within the context of family and community.

Limitations

One of the limitations of this study is that these results cannot be applied to all Alaska Native Elders statewide, nor to other populations of Indigenous older adults. This study contributes to the discussion on developing a conceptual framework of successful aging, particularly through the role of physical activity, that shifts the focus away from a solely Western, neoliberal perspective on successful aging. It also contributes to the literature by providing an example of a community-based participatory approach to successful aging research and demonstrates the applicability of this approach in engaging Indigenous Elders in research. We also believe, however, that an important area of future research would be to include Indigenous community members of all ages, not just Elders, to explore their perceptions of successful aging and develop community-based solutions for achieving successful aging.

Conclusion

Our research with Indigenous Elders in northwestern Alaska highlights the importance of including them in research related to successful aging. With the growing population of older adults in Alaska, it is crucial to understand how older adults, especially Indigenous

Elders living in rural and remote communities, can be better supported to have a high quality of life throughout their remaining years in the place of their choice. In order to do this, conducting research with older adults to understand what it means to age in a good way is particularly useful, especially through the use of a collaborative, participant-led approach.

For Elders in our research, engaging in physical activity regardless of age was not seen just as a personal responsibility to maintain health and to age successfully, it was also done as a way to resist society's view of older adults as deteriorating and declining; to improve or maintain their physical, mental, emotional, and spiritual health; or to enable them to continue participating in subsistence activities that are rooted in their culture and traditional roles as Elders. Although this research was an important step in contributing to the literature on successful aging and physical activity, there is much more that needs to be done to ensure that Indigenous older adults' voices are included and respected in research, policy, and practice. Additionally, given the heterogeneity of and within Indigenous populations in North America, it is important to continue engaging in research with Indigenous populations to avoid making generalizations about what it means to successfully age for Indigenous older adults.

Furthermore, given that the Elders in this study highly valued the ability to participate in subsistence activities, it would be beneficial to also understand the role of physical activity in successful aging for Indigenous older adults who live in urban communities who may not have as many opportunities to participate in subsistence activities. As the literature suggests, more culture-specific understandings of aging and physical activity that challenge Western concepts (Pike, 2015; Torres, 1999) are needed in order to support older adults while aging in a way that is inclusive and relevant, and which reflects their own values, beliefs, and cultures.

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