

*This is a pre-copyedited, author-produced version of an article accepted for publication in the Journals of Gerontology Series B: Psychological Sciences and Social Sciences following peer review. The version of record - Expanding the Circle of Knowledge: Reconceptualizing Successful Aging Among North American Older Indigenous Peoples. Jessica E. Pace; Amanda Grenier, The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 2016 [update complete citation information once pagination information is available] is available online at:[<http://psychsocgerontology.oxfordjournals.org/cgi/content/abstract/gbw128?ijkey=Y1NHAORoMzq4KA6&keytype=ref>]*

Revision 3

## **Expanding the Circle of Knowledge: Reconceptualizing Successful Aging among North American Older Indigenous Peoples**

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### **Funding**

This research was supported by an Alzheimer Society of Canada Research Program Postdoctoral Fellowship (15-23 to JP)

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## Abstract

### **Objectives**

Indigenous older peoples' voices and experiences remain largely absent in the dominant models and critical scholarship on aging and late life. This paper examines the relevance of the model of successful aging for Indigenous peoples in North America.

### **Method**

This paper presents the results of a review of the published conceptual literature on successful aging among Indigenous peoples. Our intent was to explore the current state of the field of successful aging among Indigenous peoples and suggest dimensions that may be more reflective of Indigenous voices and experiences that leads to a more inclusive model of successful aging.

### **Results**

Based on our review, we suggest four dimensions that may broaden understandings of successful aging to be more inclusive of Indigenous older people: Health and wellness, Empowerment and resilience, Engagement and behavior, and Connectedness.

### **Discussion**

Our review suggests that Indigenous peoples' voices and experiences are beginning to be included in academic literature on successful aging. However, we suggest that understandings of successful aging be broadened based on our summative findings and a process of community involvement. Such processes can lead to the development of models that are more inclusive to a wide range of older people, including Indigenous older peoples.

**Key Words:** Indigenous peoples, Inequality, Marginalized groups, Diversity, Critical perspectives

## Expanding the Circle of Knowledge: Reconceptualizing Successful Aging among North American Older Indigenous Peoples

Successful aging was developed in the 1980s as a response to interpretations of aging as a period of decline and dependency. Over time, this concept has gained traction as a leading focus for research, policy, and practice. The dominant model of successful aging (Rowe & Kahn, 1987) includes three main criteria: 1) low probability of disease and disability, 2) high physical and cognitive functional capacity, and 3) active engagement with life. While this model has been widely used across international contexts for over 30 years, questions have been raised about the extent to which it applies to minority populations, diverse cultural groups, or vulnerable or marginalized people (Dillaway & Byrnes, 2009; Lamb, 2014; Lewis, 2011; Liang & Luo, 2012). In this paper, we report the results of a review of secondary sources on the concept of successful aging among Indigenous older peoples.

### **The Context for Our Review**

Our review is situated in the critical literature on successful aging among marginalized groups, and the existing work on aging among Indigenous peoples. To date, successful aging has received criticism with regards to the application to marginalized groups (Baker, Buchanan, Mingo, Roker, & Brown, 2015; Dillaway & Byrnes, 2009), the focus on function (Depp & Jeste, 2006), individualism and control (Dillaway & Byrnes, 2009; Leibing, 2005), and cultural relevance (Torres, 2003). One of the underlying questions is whether the concept of successful aging can be said to apply to vulnerable or marginal groups where typical criteria of activity, independence, and economic circumstances are concerned (Grenier, 2012; Katz, 2013; LaPlante, 2014). A recent special issue from *The Gerontologist* (Pruchno, 2015), for example, drew attention to concerns about the dominance of successful aging, and the privileging of health over

economic, socio-cultural, and structural influences on health (Dillaway & Byrnes, 2009; Katz & Calasanti, 2015; Martinson & Berridge, 2015). Although there is a growing body of critical work about successful aging, less is known about the perspectives of Indigenous older people. Our research was prompted by a consideration of how successful aging may or may not align with the experiences of older Indigenous peoples in North America. Our intent is to situate the experience of this population in the emerging scholarship on marginalized groups, and add the voices of Indigenous older people to the discussion. We recognize that although similar processes of differentiation and power act across group boundaries, unique histories and experiences function differently to shape the experience of diverse population groups (Dhamoon & Hankivsky, 2011).

The literature on Indigenous people's health and well-being reflects a balance between risk and resilience. The existing literature outlines that Indigenous peoples are at high risk of poor health outcomes as they age as a result of historical and structural factors. Diverse influences such as the Indian Residential School legacy, intergenerational trauma, poverty, obesity, mental health, and increased levels of violence, suicide, and substance abuse are all considered to impact the health of Indigenous peoples (Baldrige, 2001; Kirmayer, Simpson, & Cargo, 2003; Reading, 2009). Indigenous peoples are reported to live less long than their mainstream counterparts<sup>3</sup>, have disproportionately high risk factors for chronic disease (Jacklin, Walker, & Shawande, 2013; Jervis, Cullum, & Manson, 2006), and are more likely to have multiple co-morbidities including chronic conditions such as arthritis, hypertension, cardiovascular disease, cancer, and diabetes (Adelson, 2005; Cooke, Guimond, & McWhirter, 2008; Goins & Pilkerton, 2010; Wilson, Rosenberg, Abonyi, & Lovelace, 2010). Elder abuse has

also emerged as an increasing threat to older peoples' well-being in Indigenous settings (Baldrige, 2001).

Indigenous perceptions of wellness tend to be holistic and include participation in healthy lifestyles and community engagement (Assembly of First Nations, 2007; Lewis, 2014). Yet, changing lifeways are considered to have a detrimental effect on health and well-being (Habjan, Prince, & Kelley, 2012; Lanting, Crossley, Morgan, & Cammer, 2011; Lewis, 2013a). The disruption of traditional subsistence practices due to environmental degradation (Furgal & Seguin, 2006), the dispossession of land, and relocation to urban communities, for example, have contributed to an increasingly sedentary lifestyle and poorer diet for many Indigenous peoples (Lewis, 2010, 2013b, 2014; Reading, 2009). Such changes are considered to have resulted in higher levels of obesity and cardiovascular health issues (Hulko, et al., 2010; Lewis, 2013b; Reading, 2009). However, despite these challenges, research on the subjective perceptions of older Indigenous peoples reports positive feelings about old age (Cooke, et al., 2008), and virtue in working to accept and overcome the challenges that may accompany aging (Collings, 2001; Pace, 2013).

Where aging is concerned, the perceptions of Indigenous peoples have been noted to differ from mainstream North American populations. The existing literature focuses on Indigenous understandings (Lewis, 2009) that include a view of the life course as cyclical rather than linear, and of a life that continues after death in the spirit world, and through one's descendants (Assembly of First Nations, 2007). The literature on aging among Indigenous older people has drawn attention to the respected status of Elders'<sup>4</sup> as knowledge keepers, teachers, and mentors (Assembly of First Nations, 2007). Cultural norms of respect and care have also

been reported by older Indigenous peoples (Baskin & Davey, 2015), as have concerns about how traditional roles for older people may be threatened by the ongoing impacts of colonization (Dumont-Smith, 2002), government policy, and technological change (Baldrige, 2001). The complex factors that are considered to shape Indigenous peoples' experiences of aging include traditional cultural beliefs, ongoing cultural change, and the long-term impacts of the intergenerational transmission of trauma, poverty, and oppression (Yellow Horse & DeBruyn, 1998), with these factors likely playing a part in the configurations of successful aging among Indigenous peoples.

### **The Challenges of the Successful Aging Model for Indigenous Peoples**

The evidence on health outcomes among Indigenous peoples, combined with Indigenous knowledge and historical trajectories, raise a number of questions where the applicability of successful aging is concerned. The primary criterion in Rowe and Kahn's (1997) model is *low probability of disease and disability*. 'Successful agers' are identified as individuals who have good health and are at low risk of becoming ill or impaired. The assertion made in the dominant model of successful aging is that individuals can control certain aspects of their behavior in order to prevent the onset of disease and disability as they age (Rowe & Kahn, 1997). However, this embedded notion of individual responsibility overlooks social, political, and historical influences, as well as socio-economic and health disparities that may limit Indigenous peoples from engaging in positive health behaviors (Loppie-Reading & Wein, 2009). Social and structural barriers that include colonialism, a lack of self-determination, disruptions to cultural continuity, and restricted access to resources, must also be considered when discussing successful aging among older Indigenous peoples (Loppie-Reading & Wein, 2009). In the case of Indigenous people, successful aging takes place at the intersection of individual, social, and

cultural contexts across the life course, and against particular historical, economic, and political backdrops.

The second criterion in Rowe and Kahn's (1997) model of successful aging is high physical and cognitive functional capacity. Here, it is the social determinants of health that are a challenge where applicability to Indigenous peoples is concerned. Indigenous older people are reported to experience decline at a younger chronological age and are frequently disadvantaged in terms of the protective factors that support continued function (Reading, 1999). Lower educational attainment, low income, and poor access to the types of services and supports that are considered to encourage activity may impact the interpretation and achievement of 'success' (Loppie-Reading & Wein, 2009; Reading, 2009). Disenfranchisement and oppression that result from colonialism also have continued implications for health as Indigenous peoples age (Kirmayer, et al., 2003). Our concern, consequently, is that dominant models of successful aging may unintentionally marginalize and/or overlook cultural and historical responses to aging.

The third criterion of Rowe and Kahn's model is engagement with life, which focuses on the importance of a person's social support networks, involvement, social-emotional interaction, and support with activities of daily living (see Rowe & Kahn, 1997). This third dimension holds the greatest potential for synergies between the existing model of successful aging and the experiences of Indigenous older people. There appears to be some alignment between the elements reported by Indigenous peoples and the definitions of success that are prevalent in research, policy, and practice. Indigenous older peoples discuss resilience (Brass, 2004; Lewis, 2009, 2011, 2013a), respect (Baskin & Davey, 2015; Brass, 2004; Collings, 2001; Hopkins, et al., 2007), care (Baskin & Davy, 2015), intergenerational involvement and wisdom (Abonyi & Favel, 2012; Collings, 2001; Lewis, 2014), leisure activities (Pace, 2013), and meaningful roles

(Baskin & Davey, 2014; Brass, 2004; Lewis, 2014) as important to their aging. As such, parallels also exist with the emerging literature representing marginalized older people, who stress interdependence, resilience, and acknowledgment of life trajectories as meaningful measures of ‘success’ (Baker, et al., 2015; Fabbre, 2014; LaPlante, 2014; Raymond & Grenier, 2015).

In this paper, we consider and assess the extent to which successful aging is applicable to North American Indigenous peoples. Our intent is not to suggest that there is a universal experience of Indigeneity, nor sustain a one-dimensional stereotyped portrayal of Indigenous peoples. There is great heterogeneity among North American Indigenous populations. There are hundreds of Indigenous cultural groups with diverse languages, histories, spiritual practices, geographical differences, and belief systems across the continent (Baldrige, 20001). Indeed, a majority of Canadian (51% in 2011) and American (71% in 2010) Indigenous peoples reside in urban areas (Aboriginal Affairs and Northern Development Canada, 2016; Urban Indian Health Institute, 2013) and thus face different challenges to Indigenous peoples who reside on reserve<sup>5</sup> or in rural or remote areas.

## **Methods**

This paper presents the results of a review of conceptual work on successful aging among older Indigenous peoples, and based on this review, suggests dimensions that may be more in line with older people’s realities and experiences<sup>6</sup>. Our review was carried out in March 2016 using three databases: Web of Science, AgeLine, and Bibliography of Native North Americans (BNNA)<sup>7</sup>. We conducted an all-terms search of the terminology used to represent Indigenous populations<sup>8</sup>: “*Indigenous*”, “*Aboriginal*”, “*Native*”, “*Native American*”, “*American Indian*”,



*“Alaska Native”, “First Nations”, “Inuit”, and “Métis”* combined with terms related to successful aging: *“successful aging”, “healthy aging”, “aging well”, and “aging and health”*. Due to the complexity of the search, each of the successful aging-related terms were run manually against each of the terms reflecting Indigenous populations to identify relevant articles.

Our search resulted in 1,198 hits (Web of Science = 50, AgeLine = 734, BNNA = 414). However, the majority of these were not relevant for our study. To be included, articles had to be original studies that addressed perspectives of ‘success’ or ‘well-being’ among older Indigenous peoples in North America. Further, papers had to focus on defining the elements of successful aging in Indigenous settings and/or make reference to successful aging among Indigenous older people. Papers that reported only on aging or health among Indigenous peoples were excluded. Our search produced 12 articles which met our inclusion criteria. Four papers were excluded as duplicates, and four additional articles were hand-selected using a snowball approach. Of the 16 resulting papers, three were theses (1 MA, 2 PhD), 12 were peer reviewed articles, and one was a report on a conference presentation. Six of the articles were by Lewis, based on results from two programs of research. 13 of the studies were qualitative, and three were quantitative. The aim of our study was to identify the key elements of successful aging and assess the fit between the concept of successful aging and the perceptions of Indigenous older people. Our primary concern was thus on the conceptual definitions and the subjective accounts of Indigenous peoples.

We reviewed the content of the 13 qualitative papers to identify common themes across the selected studies. Our work is grounded in a critical perspective that incorporates Indigenous perspectives and decolonizing methodologies as a means to counter Western positivistic research paradigms (Ermine, Sinclair, & Jeffrey, 2004; Evans, et al., 2009). In particular, we draw on the notion of ‘ethical space’ (Ermine, 2000) as a means to bridge Indigenous and Western

worldviews to create shared meanings and new understandings that are mutually beneficial to Indigenous peoples and researchers. An overview of the key concepts from each paper is presented in Table 1<sup>9</sup>. Results from the published literature on successful aging among Indigenous older peoples were analyzed and synthesized into four summative elements. Our suggested criteria are based primarily on the results from the 13 conceptual articles. The remaining three articles (Garrett, et al., 2006; Nelson, et al., 2013; Schure, et al., 2013) did not include enough conceptual detail for inclusion in the summative elements, but offered useful comparison between emerging Indigenous perceptions and the Rowe and Kahn model.

Insert Table 1 here

## **Results**

### **Knowledge of Indigenous Aging**

Despite regional variations and socio-cultural and historical differences, the studies included in our review share striking similarities. Our results indicate that the conceptual work on successful aging among Indigenous older people includes voices and experiences of Canadian Inuit (Collings, 2001), Native Americans (Garrett, Morton, & Black, 2006; Laditka, et al., 2009; Nelson, Noonan, Goldberg, & Buchwald, 2013; Schure, Odden, & Goins, 2013), Alaska Natives (Hopkins, Kwachka, Lardon, & Mohatt, 2007; Lewis, 2009, 2010, 2011, 2013a, 2013b, 2014; Nelson, et al., 2013), Canadian First Nations (Baskin & Davey, 2015; Brass, 2004; Pace, 2013), and Canadian Métis (Abonyi & Favel, 2012). Across the studies, findings suggest that understandings of successful aging among Indigenous older people focus on a positive attitude

and willingness to adapt to the changes that accompany aging, rather than an absence of disease, disability, and decline (Collings, 2001; Pace, 2013). Indigenous participants report that behavioral factors such as diet and exercise contribute to ‘success’ in aging. However, connectedness to family, community, and culture, as well as the fulfillment of traditional roles appear to be more salient determinants of ‘successful aging’ (Baskin & Davey, 2015; Collings, 2001; Lewis, 2009, 2011, 2013a; Pace, 2013). Studies also consistently draw attention to barriers that limit Indigenous older people from successful aging, including historical trauma (Baskin & Davey, 2015), loss of culture (Brass, 2004), poverty (Collings, 2001; Pace, 2013), and changing lifeways (Lewis, 2010; Pace, 2013).

Our analysis of the published literature resulted in the identification of four emergent criteria that are considered to play a key role in shaping successful aging among Indigenous peoples. These include: 1) Health and wellness, 2) Empowerment and resilience, 3) Engagement and behavior, and 4) Connectedness. The proposed elements of successful aging among Indigenous peoples share commonalities with the Rowe and Kahn (1997) model, including the desirability of good health, the capacity for individuals to influence health through behavior, and the importance of engagement. Parallels also exist between the Rowe and Kahn model (1997) and the three quantitative studies which indicate that resilience and social engagement are correlated with good mental and physical health (Nelson, et al, 2013; Schure, et al., 2013), as well as an association between healthy aging of Indigenous peoples and higher income, lower disease burden, and higher functional status (Garrett, et al., 2006). These results underscore the need to further examine the definitions and experiences of the suggested criteria, as well as the supports that are deemed necessary to overcome barriers and achieve ‘success’.

### **Conceptualizing Successful Aging among Indigenous Older People**

Based on the results of our review, we suggest that there is a need to extend current models of successful aging to be more culturally appropriate, inclusive of a wide range of voices including those of Indigenous peoples, and to better account for experiences of inequality among marginalized older people. In this section we discuss the four emergent dimensions, which are based on a secondary analysis of published results on the experiences of Indigenous groups in North America. As such, there are limitations with regards to representation. To ensure ‘cultural safety’, a concept which recognizes power differences, structural inequalities, and community healing (Ramsden, 1990; Brascoupé & Waters, 2009), we suggest that any next steps, such as the development of a model, occur within Indigenous communities. Exchange must occur in consultation with a variety of stakeholders that include Indigenous peoples and care providers. This paper offers an initial synthesis of the suggestions made thus far in published research. Our hope is that summarizing these trends can provide a jumping off point for future discussions and community-based processes, and a sense that there may be shared interpretations of successful aging across Indigenous contexts.

Our literature review on successful aging among older Indigenous people resulted in the identification of four elements that could inform the development of a meaningful and inclusive model. These include: 1) Health and wellness, 2) Empowerment and resilience, 3) Engagement and behavior, and 4) Connectedness. We envision that the four proposed notions would be non-hierarchically organized to better align with Indigenous<sup>10</sup> representations of health and the life course. A circular or cyclical arrangement, for example, may help to incorporate Indigenous understandings (e.g. medicine wheel) and the potential for synergy between factors (Adelson, 2002; Graham & Stamler, 2010; Nunavut Department of Education, 2007) into the model of

successful aging. It is difficult to imagine the visual depiction without having gone through community consultation. However, to ensure inclusivity, the model would acknowledge the impacts of social and structural determinants, historical trauma and unresolved grief (Yellow Horse and De Bruyn, 1998). An adapted and inclusive model would balance the tension between risks and the potentially protective effects of Indigenous knowledge, culture, and resiliency. It may include for example, holism, balance, and the interconnectedness of the factors that contribute to successful aging, and would allow for strength and resilience as compensation for shortcomings or weaknesses. As such, an inclusive model would feature multiple pathways to ‘success’.

**Health and wellness.** Physical and mental health, and wellness more generally, emerged as a key theme in the literature on successful aging among older Indigenous peoples. However, Indigenous understandings of health, and the mechanisms through which health is attained, differ from individual functional or biomedical models. In an Indigenous worldview, health is understood holistically to encompass physical, mental, spiritual, and emotional realms. Wellness is understood to be interconnected with family, social relationships, and the natural world (Graham & Stamler, 2010). This idea is summarized by Brass (2004), who outlines that Elders evaluate their health in relation to the wellness of the whole community. Thus, in order to support older peoples’ wellness, the health of the whole community must first be addressed.

The Indigenous perspectives outlined in the published articles highlight how physical, mental, and cognitive health are desirable, but not required for successful aging. Among the published studies, declining health and changes to ability are reported to be inherent to the aging process. In Collings’ (2001) study, Inuit discuss their beliefs that there is “no such thing as good health in old age” (p. 141), and participants in Pace’s (2013) study described physical and

cognitive decline as an acceptable part of aging. As such, ‘successful agers’ are not characterized by function and health status, but their efforts to accept and adapt to the challenges of aging (Collings, 2001; Pace, 2013). In particular, older Indigenous people describe ‘successful agers’ as individuals who have a good attitude and make an effort to remain actively engaged within the limits defined by their health (Collings, 2001; Pace, 2013). The finding that illness is not considered to prevent a person from aging successfully is an important insight when experiences of older Indigenous peoples are considered against poor population health outcomes of these groups.

**Empowerment and resilience.** Resilience emerged as a prominent criterion for successful aging among Indigenous peoples. The majority of published papers in our study report the centrality of an emotional or attitudinal component to success (Baskin & Davey, 2015; Collings, 2001; Lewis, 2013b; Pace, 2013). In this theme, attitude is considered to intersect with multiple aspects of aging, and to impact participation, relationship quality, and wellness. Key components of successful aging among Indigenous peoples include a positive outlook and stable mental state (Baskin & Davey, 2015; Collings, 2001), including the use of humor and laughter to cope with challenges and heal from trauma (e.g. residential school experiences) (Baskin and Davey, 2015; Pace, 2013). Humor is described as a cultural mechanism and spiritual tradition that is considered to have healing properties and bolster resilience (Garrett, et al., 2005). In this context, resilience is considered to be strongly connected to the maintenance and restoration of Indigenous cultural values, the empowerment of older people, and engagement in meaningful roles, that include, but are not limited to the traditional role of Elder (Brass, 2004; Lewis, 2014).

**Engagement and behavior.** Active engagement in life emerged as a component of successful aging among older Indigenous peoples. Across the studies, engagement included

participation in traditional family and community roles, involvement in leisure activities, and an enjoyment of social gatherings, community events, and hobbies, that are often labelled healthy lifestyle behaviors (Abonyi & Favel, 2012; Baskin & Davey, 2015; Hopkins, et al., 2007; Lewis, 2010; Pace, 2013). Older Indigenous people in these studies described ‘successful agers’ as individuals who were actively engaged in self-care (i.e. eating well, getting exercise) and who did not give up on themselves when facing challenges (Lewis 2010, 2013b, Pace, 2013). Continued contributions to community and cultural life, including teaching and transmitting knowledge were also considered meaningful (Abonyi & Favel, 2012; Baskin & Davey, 2015; Collings, 2001; Lewis, 2011; Pace, 2013). Cited examples included leadership in local ceremonies, teaching, or counselling, as well as ongoing learning and developing new skills (Baskin & Davey, 2015). Anishinaabe participants in Pace’s (2013) study, for example, describe well-being as a process of exercising their bodies and minds through participation in enjoyable activities. However, while many older Indigenous people discussed the importance of continued engagement, they also outlined the barriers to participation. Poverty, changing lifeways, poor health, and/or physical changes were considered to limit their options for engagement and positive lifestyle choices (Collings, 2001; Lewis, 2013b; Pace, 2013).

**Connectedness.** Finally, relationships with family, community, and social support were reported as integral to successful aging among older Indigenous peoples. Across studies, social support included older peoples’ contributions to kin and community, as well as support they receive from their families and social networks. Older Indigenous peoples described maintaining roles as leaders in traditional ceremonies, teaching, passing on traditional knowledge, and providing care for their grandchildren as components of their ‘success’ (Baskin & Davey, 2015; Jervis, 2010). According to the published studies, these roles were considered to support

generativity, contribute to a sense of pride, and provide opportunities for socializing and laughter. Together, the various features of connectedness were considered to support older people to cope with the various challenges associated with aging (Polacca, 2001).

The literature also included examples of how families and communities supported older people and outlined the types of activities and connections that were considered to comprise support. Research identified assistance with everyday activities such as grocery shopping, transportation, or home maintenance, as well as the provision of emotional support (Baskin & Davey, 2015; Pace, 2013) as important facilitators of ‘connectedness’. Views of health, success and well-being also extended beyond the individual to the community and environment (Brass, 2004; Ranzijn, 2002), with aging in place emerging as an important concept for health (Abonyi & Favel, 2012). Rural life, in particular, was perceived to benefit continued connection to social and support networks, and engagement with the natural environment through participation in subsistence activities which supported a good diet and provided opportunities for physical activity (Lewis, 2010, 2014). Interdependence, collectivism, and reliance on family were often highlighted across the studies as a contrast to Western notions of independence. Upholding traditional roles in family and community were also considered as crucial to older peoples’ ability to maintain independent, productive, and meaningful lives.

## **Discussion**

Our review suggests that Indigenous peoples’ voices and experiences are beginning to be heard and recognized in the literature on successful aging. These voices signify an important starting point from which to broaden current understandings of successful aging so they are more inclusive of Indigenous knowledge. Descriptions of successful aging among Indigenous older peoples have some congruence with mainstream conceptualizations including positive attitude,



autonomy, lifestyle, and social interaction, in addition to health, function, and engagement (Bassett, Bourbonnais, & McDowell, 2007; Franklin & Tate, 2009; Rowe & Kahn, 1997; Steptoe, Wright, Kunz-Ebrecht, & Illiffe, 2006). However, our review, combined with knowledge in the field of Indigenous studies, stresses the importance of socio-cultural knowledge and practices and historical factors that influence Indigenous older adults' experiences with health and 'success'. Here, there exists a broader challenge of identifying how models of successful aging may better address the inequalities experienced by vulnerable or marginalized groups. Our research underscores that an inclusive model for research, policy, and practice must be capable of recognizing and accounting for social determinants of health, inequalities across the life course, and decline, illness, and disability as realities of aging (Grenier, 2012; Katz & Calasanti, 2015; Lamb, 2014; LaPlante, 2014; Liang & Luo, 2012; Loppie-Reading & Wein, 2009; Martinson & Berridge, 2015).

Based on the results of our review, we suggest that a more inclusive model of successful aging would focus on the interrelationship between wellness, empowerment, engagement, and the importance of family, community, and environment. Acknowledging resilience and adaptability seem particularly important. Several scholars in gerontology have recommended that resilience be considered in models of successful aging (Harris, 2008; Harris & Keady, 2008; Inui, 2003; Wild, Wiles, & Allen, 2013). Harris (2008), for example, has argued that most older people can develop resilience, regardless of cultural background, socioeconomic status, or health, and further, that 'resilient aging' allows for interdependence, adaptability, and survival (Harris, 2008). Envisioning 'success' as a process rather than an end point (Dillaway & Byrnes, 2009) may provide a path for older Indigenous peoples to exercise resilience and overcome challenges through healing, strength-building, and support. Together, the findings of our review

lead us to suggest that optimism, humor, spirituality, and connectedness also be included as important culturally-grounded mechanisms of Indigenous peoples' resilience.

Healing is also considered to be meaningful in fostering the resilience and adaptability of older Indigenous people. Healing may take various forms, including the restoration of traditional values and roles (Brass, 2004). However, it is also important to acknowledge broader structural and historical factors. In order to move towards healing, there is a need to address historical trauma and the impacts of colonialism, and to support Indigenous agency and self-determination which have been identified as a crucial determinant of Indigenous health (Boyer, 2006). Self-determination involves empowering Indigenous peoples to have equal participation in political decision making and the possession of control over their lands, economies, and social and health services (Loppie-Reading and Wein, 2009). A model that is inclusive of Indigenous peoples should provide the space and support for an older person to adapt to changing health status and abilities, and find ways to compensate for poor health or impairment through compensatory strengths that support the highest possible level of overall wellness. We suggest that a 'culturally safe' model of successful aging among Indigenous peoples would shift the responsibility for success off the shoulders of individuals, and recognize the need for accessible supports to enable older Indigenous peoples to experience greater opportunities for well-being.

Our review focused primarily on the appropriateness of Rowe and Kahn's (1997) model of successful aging for Indigenous older people. However, in line with recent critical debates, there is a need to consider the potential relevance of successful aging for marginalized groups. In particular, there is a need for a model that better recognizes and accounts for the structural forces and social inequalities that influence aging across the life course (Katz & Calasanti, 2015; Stowe & Cooney, 2015). Several new directions have the potential to be more inclusive of vulnerable or

marginalized populations, including North America's Indigenous peoples. For example, Stowe and Cooney's (2015) linkage of successful aging and the life course approach is congruent with recognizing the complex factors that affect aging. A view of successful aging that is grounded in the life course may provide a mechanism to identify the cumulative impacts of historical practices of colonialism and oppression, the impact of continuously shifting pressures on different generations of Indigenous peoples, and experiences of resilience. However, skepticism of the extent to which existing models of successful aging apply to marginalized groups remains. Our concern is that despite emerging recommendations on the importance of building inclusive frameworks, models such as successful aging may continue to reinforce rather than counteract barriers among particular populations (i.e. people with disabilities, LGBTQ older people) (Baker, et al., 2015; Fabbre, 2014; LaPlante, 2014; Raymond & Grenier, 2015).

Considering inequality is perhaps key to assessing iterations of successful aging or any model that claims to be inclusive of diverse groups of older people. Where authors such as Rowe & Kahn (2015) draw attention to a need to acknowledge the positive potential of an aging society in future work, doing so must be balanced with attention to the experiences of marginalized groups. Recent iterations for example, have suggested that technology may play a role in fostering 'successful aging' (Rowe & Kahn, 2015). Yet, recommendations that rely on technological and scientific advances, may continue to overlook factors such as differential access to technology or cutting-edge medical care due to geography (rural and remote communities), limited economic resources, or historical trajectories that may create a reluctance to engage with health in such ways. It is thus important to reflect on the potential impacts of socio-structural factors and to adjust models of successful aging to better align with the realities of Indigenous peoples' life experiences. A flexible and inclusive model would take into account

the implications of social, historical, economic, and political determinants in order to better support aging well among diverse groups such as Indigenous older people.

### **Limitations**

Our analysis and the suggestions for a renewed focus on the dimensions of health and wellness, empowerment and resilience, engagement and behavior, and connectedness is limited in three ways. First, our study design was a secondary review of published articles that used varying methods of data collection and analysis. Second, our attempt to summarize the elements of a model that is capable of giving voice to diverse older Indigenous peoples is limited by a lack of community consultation that is consistent with critical and Indigenous methods (Lavalée, 2009; Lincoln & Guba, 2000). Our categories were based solely on the published material without the representation of the groups originally involved in the 13 studies. Third, the analysis and proposed elements of the model are exploratory and tentative. With these limitations in mind, this review represents an attempt to include the voices of older Indigenous peoples in the ongoing critical discussions, and to broaden understandings of successful aging to be more inclusive of a wide range of older people. To address these limitations, and further develop an inclusive model, additional research that is carried out in consultation with Indigenous older peoples is required.

### **Conclusions**

This paper presented a review of the published conceptual literature on successful aging among older Indigenous peoples in North America. Our goal was to explore the current state of the field, assess the relevance of existing models for Indigenous peoples, suggest directions that more accurately represent Indigenous peoples' experiences, and set the groundwork for the development of a more inclusive model. We conclude that there is a significant need for further

research on the role of Indigenous knowledge, cultural strengths, and resilience in successful aging. There is also a need to develop research, policy, and practice that is more inclusive of Indigenous peoples. Finally, although our criteria were developed based solely on the published insights from Indigenous older people, the emergent dimensions have the potential to inform a model that is relevant for a range of marginalized populations who are also impacted by historical and structural factors which shape their opportunities for ‘success’. We suggest that moving forward, the development of key concepts and frameworks such as successful aging explicitly consider the unique challenges of marginalized groups as they unfold across the life course, as well as the resiliencies which may be harnessed to bolster success in aging and late life.

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## Footnotes

<sup>1</sup> The projected life expectancy at birth for the total Canadian population is 79 for males and 83 for females. Canadian Indigenous groups have a lower life expectancy (Males: First Nations (73), Inuit (64), Métis (74); Females: First Nations (78), Inuit (73), Métis (80)) (Statistics Canada, 2015). The life expectancy of Native Americans/Alaska Natives versus United States all races is: Native Americans/Alaska Natives, 73.7 and United States all races, 78.1 (HIS, 2016).

<sup>2</sup> The terms Elder and older person have distinct meanings in an Indigenous context. Elder indicates individuals who have a distinguished role in their community and act as repositories of cultural knowledge. By contrast, older person is a more general term which refers to individuals over a certain age, usually age 50.

<sup>3</sup> The term reserve is used in Canada in reference to lands which have been set aside for the use of Indigenous peoples (Minister of Justice, 1985), the equivalent American term is reservation (Bureau of Indian Affairs, 2016).

<sup>4</sup> The first and second author are non-Indigenous scholars with prior experience working with Indigenous peoples and older people from vulnerable and marginalized groups.

<sup>5</sup> A University librarian assisted with the identification of databases and refining the search strategy.

<sup>6</sup> We have used the term Indigenous throughout to broadly refer to Aboriginal peoples in North America. This is the most recognized international term, and considered the most inclusive. The term Native has no legal definition in Canada. However, the terms Native American (used interchangeably with American Indian) and Alaska Native are still used in the United States. First Nations is a term used in Canada to identify Indigenous peoples of Indian descent (Aboriginal Affairs and Northern Development Canada, 2012). When speaking broadly of

Indigenous North Americans we use Indigenous peoples, and use specific group names when referring to a distinct group of peoples (i.e. First Nations, Inuit, Alaska Natives, Anishinaabe).

<sup>7</sup> A supplementary table with a more detailed summary of the results of the qualitative studies is available on request.

<sup>8</sup> Although we were inclined to attempt a visual depiction of the model here, we feel it is inappropriate to attempt a visual representation without the consultation and involvement of an Indigenous partner and/or artist.

Table 1. *Summary of qualitative studies on successful aging among older Indigenous peoples*

<b>Author</b>	<b>Group</b>	<b>Contributors to successful aging</b>
Abonyi & Favel (2012)	Métis	Contributions to community life, transmission of cultural knowledge, culture, agency, aging in place, family and community support
Baskin & Davey (2015)	Indigenous (Unspecified)	Humor and laughter (healing, engagement), ongoing teaching and learning (traditional roles, respect), kinship, community, social networks
Brass (2004)	First Nations	Traditional cultural values (cohesion, spirituality), empowerment, resilience, community wellness (strength, determination), restoration of traditional values and Elder's roles, Elder wellness (respect, connectedness)
Collings (2001)	Inuit	Nature (health, independent living), domestic life (family relations and support), Economic circumstances (financial resources, wild foods), attitude (emotional well-being, respect, sociality)
Hopkins, et al. (2007)	Alaska Native	Keeping busy (engagement, subsistence activities), physical exercise (activity, diet, physical health), respect for Elders (transmission of knowledge, culture)
Laditka, et al. (2009)	American Indians	Longevity (function, engagement), social involvement (leisure, civic participation), attitude (accepting aging and limitations), cognitive and physical health, spirituality
Lewis (2009)	Alaska Natives	Eldership (achieving respected status, not based on age), emotional wellness, spirituality, physical health, community engagement (aging in place, support)
Lewis (2010, 2013b)	Alaska Natives	Eldership (achieving respected status, not based on age), lifestyle (rural versus urban, connectedness, subsistence), positive attitude, taking care of self and others
Lewis (2011, 2013a)	Alaska Natives	Emotional well-being (attitude, balance, traditional roles), community engagement (resilience, support, purpose), spirituality (optimism, resilience, socialization), physical health (activity, diet, drug/alcohol abstinence)
Lewis (2014)	Alaska Natives	Family and community support (inclusion, generativity), rural versus urban life (activity, support, security)
Pace (2013)	First Nations	Biological factors (health, attitude, adaptability), behavioral factors (engagement, healthy lifestyle), socio-cultural factors (poverty, culture, social support)