"We listen to our Elders. You live longer that way": Examining aquatic risk communication and water safety practices in Canada's North

Audrey R. Giles [a,*], Heather Castleden [b], Ava C. Baker [c]

[a] School of Human Kinetics, University of Ottawa, Ottawa, ON, Canada K1N 6N5
[b] School for Resource and Environmental Studies, Dalhousie University, Canada
[c] Faculty of Medicine, University of Calgary, Canada

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ABSTRACT

This paper examines ways in which Aboriginal residents of Taloyoak, Nunavut and Tuktoyaktuk, Northwest Territories perceive aquatic-based risk communication, and how this information could be used to improve water safety. We argue that aquatic risk communication with northern Aboriginal populations can be improved by identifying and accounting for the consequences of colonialism in the context of aquatic risk communication and, in turn, decolonizing water safety programs north of the 60th parallel—Canada's North.

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Introduction

In Canada's North, the Northwest Territories (NWT) Aquatics Program began in 1967 and was originally created to facilitate leadership development, but later expanded its mandate to include drowning prevention (Giles et al., 2007). Since its inception, the program has primarily relied on seasonally employed college and university students from urban, southern Canada to teach water safety in rural sub-Arctic and Arctic communities (Giles et al., 2007). At its height in 1997, this program operated deep and shallow water swimming pools, waterfronts, and programs where residents were bussed to communities with aquatic facilities, all of which allowed both Aboriginal[1] and non-Aboriginal residents of 41 communities in the NWT and Nunavut to access aquatic programming (Szabo, 2002). Though drownings have decreased in recent years, the North still reports a drowning rate that varies between 5–10 times the national average in any given year (Waldram et al., 2006). Of further concern, Aboriginal northerners drown at a rate greater than non-Aboriginal northerners and drowning is one of the leading causes of accidental death for all age groups—regardless of ethnicity—in the NWT (Government of the NWT, 2004). In light of the startling drowning statistics recorded in Nunavut and the NWT, as well as the first and third authors' critically reflexive gazes concerning past experiences as swimming pool supervisors in both Nunavut and the NWT (Baker and Giles, 2008; Giles, 2001; Giles and Baker, 2007; Giles et al., 2007), we were interested in understanding the ways in which Aboriginal northerners perceived aquatic-based risk communication, and how this information could be used to improve water safety.

The work reported here explores the perspectives of Aboriginal residents from Taloyoak, Nunavut and Tuktoyaktuk, NWT concerning aquatic programming (see Fig. 1). Building on the idea that place and culture matter in the social amplification/attenuation of risk (Masuda and Garvin, 2006), we suggest that water/boat/ice safety education in the NWT and Nunavut could be more appropriate if programmers engaged with an approach that considers *how* aquatics programming has historically been delivered in the North and *why* place and culture matter in terms of aquatic risk, thus enhancing the probability of successful water safety programs. While there are examples of appropriate risk communication strategies with Aboriginal peoples (e.g., Quigley et al., 2000; Severtson et al., 2002), in many cases (with notable similarity to risk communication with non-Aboriginal populations) the attempted strategies have failed (McComas, 2006; Usher et al., 1995). For example, Egan (1998) explored Inuit women's risk perspectives on pollution and contaminants in northern Canada. She identified sociocultural factors stemming

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* Corresponding author. Tel.: +1 613 562 5800x2988; fax: +1 613 562 5497.
E-mail address: agiles@uottawa.ca (A.R. Giles).

[1] The term Aboriginal encompasses First Nations, Métis, and Inuit peoples living in Canada.

Fig. 1. Map showing Taloyoak, Nunavut and Tuktoyaktuk, Northwest Territories.

from, and since colonial times as having influenced, women's concepts of pollution and contamination. In their study on cultural resistance to discourses. O'Neil et al. (1997) found that risk communication practitioners approached Inuit communities regarding contaminants in country foods (foods harvested locally) from the position that they were to provide simplified scientific information to "uninformed" Inuit recipients. Essentially, this approach ignored Inuit traditional knowledge concerning the risks and benefits of country food (e.g., social cohesion). Additional studies in the North found similar results and called for detailed research on individual and collective Aboriginal risk perspectives (Duhaime et al., 2004; Furgal et al., 1995, 2005; Kuhnlein and Chan, 2000; Myers and Furgal, 2006; Poirier and Brooke, 2000).

Van Oostdam et al. (2005) identified the need to incorporate Indigenous knowledge regarding the risks related to Arctic issues and environments. In terms of communication, they found that practitioners need to take into account different linguistic dialects that affect comprehension (Van Oostdam et al., 2005). We suggest that the complexities of risk communication in Aboriginal populations cannot be fully understood without recognizing the specific *historico-political* relationships embedded in places in which Aboriginal people have had ongoing relationships with non-Aboriginal settlers. For this reason, we argue that aquatic risk communication that occurs through water safety programs with northern Aboriginal populations can be appropriately created by identifying and accounting for the consequences of colonialism in the context of aquatic risk communication and, in turn, decolonizing water safety programs in Canada's North.

Review of literature

Significant strides in our scholarly understanding of risk perception and risk communication have occurred over the past 30 years. Chauncey Starr's (1969) article, which examined what societies are willing to *pay* for safety, is often cited as being *the* seminal work that launched our scholarly inquiry of risk perception. Risk, as commonly defined from within its position in classical decision theory, is conceived as the "variation in the distribution of possible outcomes, their likelihoods, and their subjective values" (March and Shapira, 1987, p. 1404). Thus, risk has traditionally been measured and couched in econometric terms. However, the foundation for research on risk perspectives lies within the psychometric paradigm of which the underlying objective is cognitive science (Slovic et al., 1982). Both the econometric and psychometric paradigms have been criticized for their individualist approaches (Douglas and Wildavsky, 1982). The psychometric paradigm, in particular, came under criticism for lacking political, cultural, and social dimensions by those who adhered to cultural theory (Douglas and Wildavsky, 1982; Douglas, 1997). They argued that individual cognitive processes, as purported by those adhering to the psychometric paradigm, were inadequate for making sense of risk perspectives (Rippl, 2002). Douglas (1992), Wildavsky and Dake (1990), Dake (1992), Johnson and Covello (1987) and others suggested that socially and culturally constructed worldviews are the most important predictors for determining risk perspectives. In an attempt to integrate the two conceptual frameworks, Kasperson et al. (1988) introduced the social amplification of risk framework (SARF). Essentially, SARF argues that psychological, social, cultural, and institutional factors influence the amplification or attenuation of risk perspectives through multiple channels of communication (Pidgeon et al., 2003). More recently, gender, age, ethnicity (Finucane et al., 2000; Satterfield et al., 2004), feelings (Slovic et al., 2004), and place (Masuda and Garvin, 2006) have also been identified as influencing the ways in which risk communication messages are sent and received.

We also know a great deal about risk communication; for example, that social, cultural, and psychological contexts contribute to the formation of risk perspectives (McComas, 2006). Three basic tenets of risk communication are in current circulation: the use of appropriate language, understanding the way that people think about and act in response to different risks, and the development of mutual understandings about risk factors (Leiss,