

Fall 9-25-2018

How would a climate change interpretive program impact visitors' leisure experiences? Evidence from a lab-based experiment

Mu He

University of Alberta Faculty of Kinesiology, Sport, and Recreation, mhe@ualberta.ca

Tom Hinch

University of Alberta Faculty of Kinesiology, Sport, and Recreation

Elizabeth Halpenny

University of Alberta Faculty of Kinesiology, Sport, and Recreation

Follow this and additional works at: https://scholarworks.umass.edu/ttracanada_2018_conference

He, Mu; Hinch, Tom; and Halpenny, Elizabeth, "How would a climate change interpretive program impact visitors' leisure experiences? Evidence from a lab-based experiment" (2018). *TTRA Canada 2018 Conference*. 3.

Retrieved from https://scholarworks.umass.edu/ttracanada_2018_conference/3

This Student Poster Presentation is brought to you for free and open access by the TTRA Canada at ScholarWorks@UMass Amherst. It has been accepted for inclusion in TTRA Canada 2018 Conference by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

How would a climate change interpretive program impact visitors' leisure experiences?
Evidence from a lab-based experiment

The climate is changing in Canada and the world (Intergovernmental panel on climate change [IPCC], 2014; Warren & Lemmen, 2014). Previous studies have indicated that climate change has posed several challenges to tourism in the Canadian Mountain National Parks, and new challenges are very likely to emerge in the future (Groulx et al., 2017; Lemieux et al., 2017; Scott et al., 2007). One of the best examples of climate change is found at the Columbia Icefield, where the glaciers have been experiencing rapid retreat attributed to increasing temperatures (Parks Canada, 2017; Sanford, 2016; Tennant & Menounos, 2013). Although the Columbia Icefield is positioned as a potential place to provide impactful climate change interpretive programs, there may be some concern by tour operators that such messages might undermine visitor experiences associated with these commercial tours (Goldberg et al., 2018; Groulx et al., 2017; Lemieux et al., 2017). Despite existing research that has examined whether and how communicating climate change can encourage mitigation behaviours (e.g. Bueddefeld & Van Winkle, 2017; Lemieux et al., 2017; Schweizer et al., 2013), few studies have specifically considered the impact of climate change interpretation on visitors' leisure experiences (Barrett & Mowen, 2014).

Accordingly, the purpose of this research is to examine how climate change interpretation would impact visitors' leisure experience during a commercial snow-coach tour of the Athabasca glacier. More specifically, this research focuses on young adults, aged 18-25, because young adults are recognized as an important target group by park-related policies (Canadian Parks and Recreation Association [CPRA], 2017; Parks Canada, 2010). The research purpose will be achieved by examining the research question: **What would the impact be on young adult clients' leisure experiences, if a climate change component were to be included in the interpretive program of the commercial snow-coach tour on the Athabasca Glacier?** Addressing this question may provide tour operators with implications of whether or not to introduce climate change interpretation into their tours.

A laboratory-based experimental design will be adopted to test the impact of the inclusion of a climate change interpretive program on the leisure experience of young adults when participating in a simulated "snow-coach tour" of the Athabasca Glacier. Students of the University of Alberta between 18 to 25 will be selected as research participants. Two groups of participants will be formed. The first group will be provided with a standard leisure-based simulation of a snow-coach experience (control group), while the other group will be provided with a simulated experience inclusive of a climate change component (treatment group). The simulated snow-coach tour will take a form of reading trip scenario, containing interpretive transcripts and photographs. After the simulated snow-coach tour, participants' leisure experiences will be measured using Oh et al.'s (2007) measurement scale which originated from "experience economy" concepts including: education, entertainment, escapism, and esthetics (Pine & Gilmore, 1999). Data analysis will be based on independent sample t-tests, which will determine if there are significant differences between the two groups with regard to education, entertainment, escapism, esthetics, as well as the overall satisfaction.

This research is in progress, and results will be discussed at the poster session of 2018 TTRA Canada Conference.

References

- Barrett, A., & Mowen, A. J. (2014). Assessing the Effectiveness of Artistic Place-Based Climate Change Interpretation. *Journal of Interpretation Research*, 19(2).
- Groulx, M., Lemieux, C. J., Lewis, J. L., & Brown, S. (2017). Understanding consumer behaviour and adaptation planning responses to climate-driven environmental change in Canada's parks and protected areas: a climate futurescapes approach. *Journal of Environmental Planning and Management*, 60(6), 1016-1035.
- Intergovernmental Panel on Climate Change (IPCC). (2014, Nov 5). Climate Change 2014: Synthesis Report. *Contribution of Working Group I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Retrieved from: https://www.ipcc.ch/news_and_events/docs/ar5/ar5_syr_headlines_en.pdf
- Lemieux, C. J., Groulx, M., Halpenny, E., Stager, H., Dawson, J., Stewart, E. J., & Hvenegaard, G. T. (2017). "The End of the Ice Age?": Disappearing World Heritage and the Climate Change Communication Imperative. *Environmental Communication*, 1-19. doi: 10.1080/17524032.2017.1400454
- Oh, H., Fiore, A. M., & Jeoung, M. (2007). Measuring experience economy concepts: Tourism applications. *Journal of travel research*, 46(2), 119-132.
- Parks Canada (2017). Columbia Icefield Area and the Athabasca Glacier. *Parks Canada*. Retrieved from: <https://www.pc.gc.ca/en/pn-np/ab/jasper/activ/itineraires-itineraries/glacier-athabasca>
- Pine, B. J., & Gilmore, J. H. (1999). *The experience economy: work is theatre & every business a stage*. Harvard Business Press.
- Sandford, R. W. (2016). *The Columbia Icefield* (3rd ed.). BC: Rocky Mountain Books Ltd.
- Scott, D., Jones, B., & Konopek, J. (2007). Implications of climate and environmental change for nature-based tourism in the Canadian Rocky Mountains: A case study of Waterton Lakes national park. *Tourism Management*, 28 (2), 570-579.
- Tennant, C., & Menounos, B. (2013). Glacier change of the Columbia Icefield, Canadian Rocky Mountains, 1919–2009. *Journal of Glaciology*, 59(216), 671-686.
- Warren, F. J., & Lemmen, D. S. (2014). Canada in a changing climate: Sector perspectives on impacts and adaptation. *Government of Canada*. Ottawa: Ontario.