



The Human Dimensions of the “Wolf Capital of the World” Initiative

by

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A thesis submitted to the
School of Graduate Studies

In partial fulfillment of the requirements for the degree of

Masters of Science
Department of Geography
Memorial University of Newfoundland

St. John’s, Newfoundland

2018

Abstract

Conflict regarding how wildlife should be managed often occurs because different groups have varying attitudes, values, and behaviors. Spirit Way Inc., an NGO in Thompson, Manitoba, was established for the purpose of creating new opportunities to diversify Thompson's economy. Spirit Way Inc. realized the economic potential of wolves and thus made the decision to develop an initiative called the "Wolf Capital of the World". Within Thompson, there is no quantitative knowledge of whether or not public support exists for the "Wolf Capital of the World" initiative. The purpose of this research is to understand public attitudes, beliefs, and values toward wolves and the "Wolf Capital of the World" initiative. In addition, this research aims to facilitate management understanding of research results. This research will fill a knowledge gap and can be integrated into the consideration of key issues surrounding wolves, wolf-related tourism, and the "Wolf Capital of the World".

Key Words: wolves, human dimensions, tourism, education

Acknowledgements

There are several individuals that were involved in the success of this research project.

I would like to thank my supervisor, Dr. Alistair Bath, for believing in me and for supporting me throughout this process. I would also like to thank my committee members: Dr. Jerry Vaske for your statistical brilliance –my program and especially my thesis would not have been the same without your generous support, and Dr. Carissa Brown for your input and patience at each stage of this process.

I would like to acknowledge the City of Thompson for welcoming me into their community and Spirit Way Inc. for their financial support as well as their hospitality in the duration of each field season.

A special mention to Jessica for being my emotional support and confidant throughout both field seasons – I would have been lost without you.

I am indebted to the friends that provided me with emotional support when I needed it most: Marie Louise, Samantha, and Lisa.

I'd like to thank my mom, Annie, and my mother-in-law, Tina, for always believing in me and reminding me that I can achieve anything.

Finally, I am forever grateful for my husband, David, who celebrated my victories and endured my struggles.

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Authorship Statement and Organization of Thesis

The author of this thesis is the primary researcher and is responsible for the literature review and design of the research proposal, the research itself, data collection and analysis, and finally the thesis. The co-authors and committee members have contributed to the research project in terms of critical feedback in each aspect of this study. For both chapters of this thesis, the author of the thesis is the primary. Co-authors for chapter one and chapter two contributed to each article in terms of data analysis and critical feedback.

This thesis is organized into four sections: introduction, chapter one, chapter two, and discussion. The introduction section discusses pertinent literature as well as the direction and purpose of this research and was written by the primary author with critical review from the supervisory committee. Chapter one, "Wolves as a Symbol of Community: Wolf Capital of the World, Thompson, Manitoba, Canada" was written in collaboration with Dr. Jerry Vaske of Colorado State University and Dr. Alistair Bath of Memorial University of Newfoundland. This paper is intended for the Journal of Human Dimensions of Wildlife. Chapter two, "Bridging the Gap: Using the Potential for Conflict Index as a Tool for Intellectual Accessibility" was written in collaboration with Dr. Jerry Vaske of Colorado State University and Dr. Alistair Bath of Memorial University of Newfoundland. This paper is intended for the Journal of Outdoor Recreation and Tourism.

1. Chapter One

Introduction to 'The Human Dimensions of the "Wolf Capital of the World" Initiative'

1.1 Human Dimensions of the “Wolf Capital of the World”

Conflict regarding how wildlife should be managed often occurs because different groups have varying attitudes, values, and behaviors. When introducing large carnivore initiatives into a community, it is necessary to understand how individuals will respond (Zajac, Bruskotter, Wilson, & Prange, 2012); whether it be reintroduction of the animal itself or ecotourism-related initiatives surrounding the animal. Such an ecotourism initiative focused on wolves is currently being established by NGO, Spirit Way Inc., in Thompson, Manitoba, Canada.

Spirit Way Inc. has several years of presence in Thompson, Manitoba. Upon establishment, the primary purpose of this NGO has been to create new opportunities for Thompson and by creating these opportunities, diversifying Thompson’s economy, which would encourage investment in new initiatives (Spirit Way Inc., 2011). Spirit Way Inc. observed an increase in the number of visitors to a wolf mural created in the city that led them to realize the economic potential of wolves and thus made the decision to continue building attractions focused on the wolf image (Spirit Way Inc., 2011). Over the past several years, Spirit Way Inc. has been studying the possibility of developing a “wolf economy” within Thompson, which would eventually lead to the creation of the “Wolf Capital of the World” initiative. This initiative is based on several smaller projects that are focused on the wolf image. Some sub-projects that have already been completed or are underway include a wolf mural (figure 1), wolf statues (figure 2), a wolf viewing center, and other similar ventures.



Figure 1. Wolf Mural in Thompson, Manitoba, created by NGO, Spirit Way Inc.



Figure 2. Wolf Statues in Thompson, Manitoba, created by NGO, Spirit Way Inc., sponsored by local businesses.

Within Thompson, there is currently no quantitative and representative knowledge of whether or not public support exists for the Spirit Way Inc. project to position Thompson as “Wolf Capital of the World”. The purpose of this research is to understand public attitudes, beliefs, and values toward wolves and toward Thompson becoming “Wolf Capital of the World”. This research will fill a knowledge gap and can be integrated into the consideration of key issues surrounding wolves, their management, wolf related tourism, and the economic nature of Thompson as “Wolf Capital of the World”. By addressing key issues, decision-makers will better understand how local perceptions can contribute to future management and future development within Thompson, Manitoba, Canada.

By integrating human dimensions into the “Wolf Capital of the World” initiative, a better understanding of how Thompson residents, visitors, and youth think about the initiative will be possible. Such information will allow decision-makers to balance extreme views by understanding how most residents, visitors, and youth feel about wolves, wolf management, and the possible implementation of the “Wolf Capital of the World” initiative in Thompson. The results from this project will help guide further educational efforts and decisions regarding the future of Thompson. By understanding where differences and conflicts may lie, we can address issues surrounding wolves and the “Wolf Capital of the World” initiative.

The objective of this project will be achieved by answering three broad research questions:

1. How do the local residents of Thompson, Manitoba feel about wolves and about promoting Thompson as “Wolf Capital of the World”?
2. Do differences in attitudes toward wolves and toward Thompson, Manitoba becoming “Wolf Capital of the World” exist among various groups within the community (residents, visitors, and youth)?
3. Do the attitudes of local residents reflect the goals and actions of Spirit Way Inc.?

Within this research, multiple theories will be used as frameworks to guide the methods, explore and disseminate results, and reveal their implications. The purpose of theoretical research in human dimensions work is to explain human attitudes, values, and behaviours, which can provide a better understanding to institutions working with people on wildlife issues. A better understanding of attitudinal research allows

managers to make effective, more informed decisions regarding wildlife and wildlife management (Decker & Chase, 1997).

1.2 Theory

1.2.1 Human Dimensions of Wildlife

Human dimensions is a field of social science that has a core focus on wildlife issues and wildlife management involving the understanding of the attitudes and behaviours of individuals (Decker & Chase, 1997). Human dimensions of wildlife can be defined as “what people think and do about wildlife and wildlife management and why they think and do that” (Decker & Chase, 1997). The field of human dimensions of wildlife has become essential in decision-making surrounding wildlife and covers a wide range of concepts including human attitudes, human behaviours, communication within groups, social and economic values, public involvement in decision-making, and public support in decision-making (Murphy, 1993; Decker & Chase, 1997).

Human dimensions is a field of conservational social science (Bennett et al., 2017) that has evolved from studies of hunter satisfaction and recreation use into a core focus on wildlife issues and wildlife management involving the attitudes and behaviours of individuals (Dubois & Hardshaw, 2013; Decker & Chase, 1997). The history of wildlife management in North America has been based on information gathered from the biological sciences (Vaske, Fulton, & Manfredo, 2001). Increasingly, however, wildlife managers often encounter issues where a biological approach is not sufficient for problem solving and decision making (Vaske, Fulton, & Manfredo, 2001). As humans have increasingly been interacting with the environment, the demand for knowledge

surrounding human-wildlife interactions as well as wildlife conservation efforts have increased (Manfredo, Teel, & Henry, 2009; Glikman, Vaske, Bath, Ciucci, & Boitani, 2011). These human-wildlife interactions can be perceived as either positive or negative, but it is generally those interactions introducing conflict that are of interest to research and management practise (Hudenko, 2012).

The end goal of human dimensions is to encourage public input to create a range of management strategies and objectives (Decker & Chase, 1997). The most basic use of information gathered from human dimensions research is to aid managers in incorporating representative interests of the public either as a direct application, or as justification for a particular decision (Vaske & Manfredo, 2012). Another major use of human dimensions work is to compare attitudes of various groups within the public and within the management sphere in order to see if differences in attitudes, values, and behaviours exist (Manfredo, 2008). By acknowledging these differences, we can discover where conflicts or disagreements may lie, which can bring forth an apparent need for education in order to mitigate conflict, promote ethical decisions, advocate for decisions, and to improve acceptance of management decisions (Vaske & Manfredo, 2012).

1.2.2 Cognitive Hierarchy Theory

There are a number of social psychology theories that are often used in human dimensions research. The study of Thompson residents and visitors will visit the theory of planned behavior (Fishbein & Ajzen, 1975) relative to the cognitive hierarchy model (Vaske & Donnelly, 1999). The theory of planned behavior and the cognitive hierarchy model are used to understand how the relationships between attitudes, values, and

behavioral intention contributes to the actual behavior of individuals. The cognitive approach is one that is used frequently in human dimensions when considering social-psychological actions of humans. This approach focuses on values, attitudes, behavioral intentions, and actual behaviors arranged in a hierarchy of cognition (figure 3) (Vaske & Donnelly, 1999). Investigating values is important to social science because it can predict and evaluate how people feel and/or what people will do in human-wildlife interactions (Fulton & Manfredro, 1996; Vaske & Donnelly, 1999; Manfredro, 2008). The connection between values, attitudes, and behaviors can be essential in altering a person's behavior for a more favorable outcome (Vaske, 2008; Clayton & Myers, 2009).

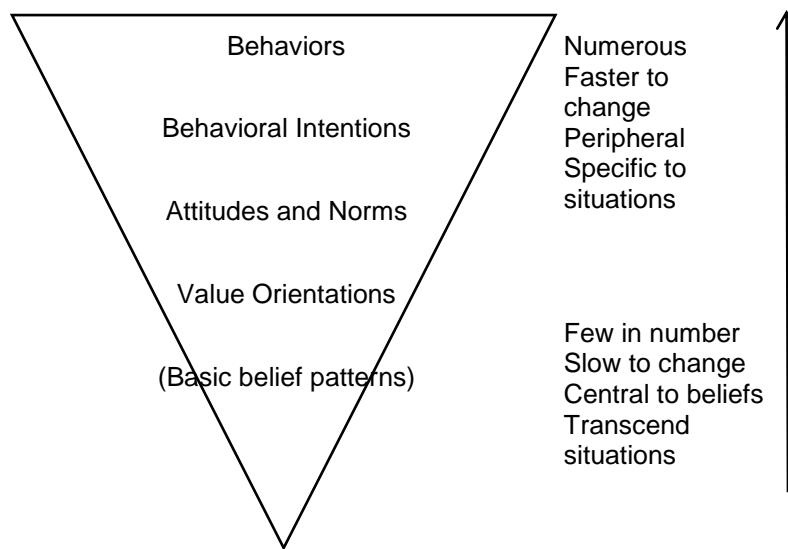


Figure 3. The Cognitive Hierarchy Model of Human Behavior.

A value is a representation of an individual belief about what is considered right and wrong. Oftentimes values transcend situations, are few in numbers, and can be difficult to change, however, investigating values is important to social science because it can predict and evaluate how people feel and/or what people will do in human-wildlife interactions (Fulton & Manfredro, 1996; Vaske & Donnelly, 1999; Manfredro, 2008). The

connection between values and attitudes and behaviors can be essential in altering a person's behavior for a more favorable outcome (Clayton & Myers, 2009). Within human dimensions, the study of values can reveal where conflicts may lie within and between key groups, which can later help managers in identifying target groups that need education regarding the minimization of resource impacts (Needham, 2010).

The next component of the cognitive hierarchy model involves attitudes. Analysis of attitudes is important in human dimensions work because it describes how a person thinks about a given object, action, or issue (Manfredo, 2008), whether positive or negative (Vaske & Donnelly, 1999). There are three components of attitudes: affective, which is what we feel; cognitive, which is what we believe; and behavioral, which is how we act (Kamradt & Kamradt, 1999). These components of attitudes can be affected by different factors such as age, gender, education, culture, and religious beliefs (Kleiven, Bjerke, & Kaltenborn, 2004). Recognizing attitudes of target groups and the factors that affect them can be central to creating effective management plans and policies (Larson, 2010).

Following attitudes, the cognitive hierarchy model considers social norms, which are what people consider to be standards shared by all persons within a recognized social group, otherwise known as what "should" be done in a given situation (Vaske & Manfredo, 2012). Studying norms can explain why people act the way they do in various scenarios and what individuals or groups find socially acceptable in terms of wildlife management (Vaske & Manfredo, 2012).

The components of attitudes, when combined with values, can influence the behavioral intention and the actual behavior of an individual person (Schwartz, 1992;

Fishbein & Ajzen, 2010). Behavioral intention is described as what an individual is willing to do, versus overt behavior, which is described as what a person does (Hrubes & Ajzen, 2001). Behavior can also be affected by social and cultural factors including: collective experience, which is influence caused by community; social identity, which is self-identity within a community; religion, which include spiritual beliefs that influence behavior; and source of income (Clayton & Myers, 2009; Dickman, Marchini, & Manfredo, 2013). A distinction can also be made between descriptive and injunctive norms. Descriptive norms are the perceived action following a given scenario while injunctive norms are norms that are considered acceptable or unacceptable (Schulz, Nolan, Cialdin, Goldstein, & Griskevicius, 2007). Even further, a distinction can be made between social norms and personal norms, which separate the individual from all members of a social group regarding expectations and behavior (Vaske, 2008). Behavior is more situation-specific and is faster to change, which can help further management efforts (Hrubes & Ajzen, 2001). Understanding the relationships of these pieces will act as a pathway to public involvement in decision-making and will emphasize the importance of human involvement in wildlife management. Through this research, we are able to have a better understanding of how Thompson residents' attitudes, values, and behavioral intention regarding the initiative, which can be useful in predicting behaviors, and influencing future management and educational decisions (Heberlein, 1989).

1.2.3 Tourism

Tourism is defined as a combination of all businesses that accommodate a traveler based on commodities (Smith, 1988). Tourism development is generally viewed

as an important set of economic activities that work together to enhance local economy by way of employment, revenue, enhanced infrastructure, and attraction of other industries (Lankford & Howard, 1994; Ko & Stewart, 2002; Dritsakis, 2004). This is a basic representation of what the “Wolf Capital of the World” initiative is for Thompson.

According to Murphy (1993), there are several standards upon which tourism and tourism development can be considered sustainable and successful. Four of those standards that are most relevant to this research include: 1) local participation (Murphy, 1993; Tosun, 2004), 2) culturally and socially relevant tourism (Murphy, 1993; Robson & Robson, 1996; Ko & Stewart, 2002), 3) proper research and planning (Murphy, 1993; Tosun, 2004), and 4) partnership between community, private sector, and government (Murphy, 1993; Jamal & Getz, 1995; Ko & Stewart, 2002).

Small, northern communities including Thompson are increasingly relying on tourism development initiatives in order to improve their economies. New, successful tourism initiatives, such as the “Wolf Capital of the World”, can provide several benefits to a small community given that support of a new initiative exists. Thus, it is pertinent to consider tourism as an essential part of ensuring such an initiative’s success.

1.2.4 Education

Within the field of human dimensions of wildlife, researchers often strive to work with managers in order to make changes or improve decision-making. Transformational learning, as described by Simsek (2012), is a process of in-depth, constructive learning that is greater than simple knowledge and understanding, which develops meaning in the lives of learners. This type of learning can result in a change of one’s worldview and

create a reflective or conscious learning experience (Mezirow, 1978; Simsek 2012). In addition, transformational learning has the ability to change one's thoughts, feelings, perspectives, beliefs, and behaviors because it alters our way of thinking or way of being involving a new paradigm of learning and living (Mezirow, 1978).

There are two types of learning under the transformational learning theory umbrella – instrumental learning and communicative learning. Instrumental learning is the manipulation of the environment through task-oriented problem solving and the determination of causal relationships (Mezirow, 1978; Taylor, 1998). Communicative learning, on the other hand, involves communication of one's needs, thoughts, feelings, values, and desires (Mezirow, 1978; Taylor, 1998). This research is related more-so to instrumental learning and the ways in which transformational learning can improve problem solving skills for managers and/or decision makers.

Perspective transformation is core to transformational learning and is a secondary process where meaning is created by reconstruction of dominant discourse (Mezirow, 1978; Mezirow 2004). There are three dimensions of perspective transformation; psychological, convictional, and behavioral – all three lead to changes in understanding the self, belief systems, and lifestyles (Mezirow, 1978; Clark, Clapp, Smith, & Wigley, 1991). For the “Wolf Capital of the World” initiative, we demonstrate results from our research in such a way that we hope a perspective transformation in managing bodies will occur in order to improve problem solving and decision making skills.

1.3 Study area

This research is being conducted in Thompson; a small city of 12,839 people (Statistics Canada, 2012), located in mid-to-northern Manitoba with a land area of 3,481.24 square kilometres (figure 4) (Statistics Canada 2012). Thompson is a mining town and it is known as the “Hub of the North” (Thompson 2014a). Individuals from surrounding communities travel to Thompson for health care, government administration offices, major transportation, and other services. For the past several years, Thompson has been labelled “Crime Capital of Canada” as it has been ranked number 1 of 297 cities in Canada for violent crime (Thompson Citizen 2014). This, combined with the downward spiral of the nickel market (Thompson 2014b), has created a need for Thompson to diversify their economy and re-shape their current image as a crime capital. Focusing on wildlife, wilderness, and wolves is considered a possible direction for the city from the perspective of NGO, Spirit Way Inc.

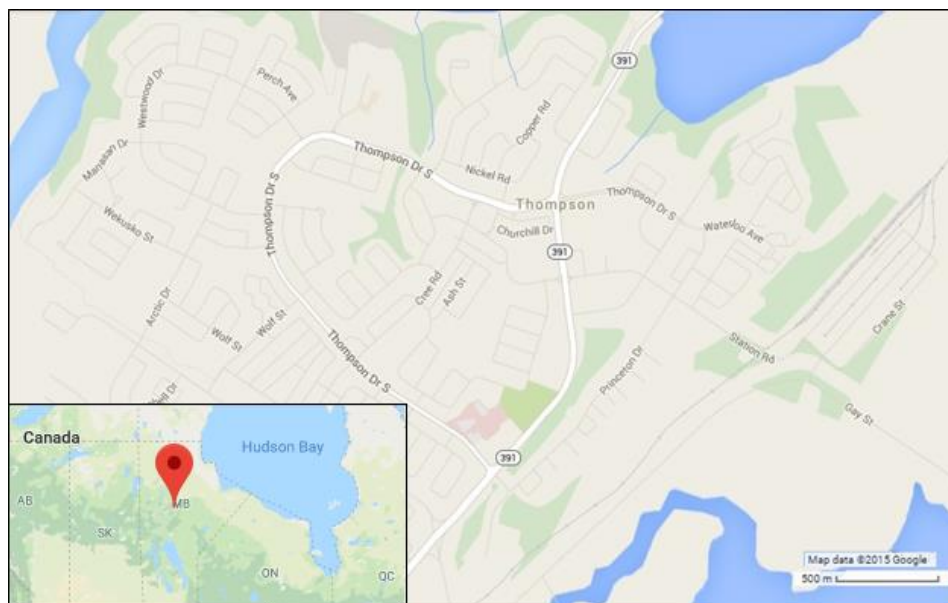


Figure 4. Map of Thompson, Manitoba, Canada

1.4 Methods

1.4.1 Sampling Populations

This research was conducted in two phases:

In phase one, the sampling frame included all residents within the city of Thompson listed in the current telephone directory. Resident participants were randomly selected from the local telephone directory. Individuals were randomly selected within each household and contacted by telephone to obtain a verbal acceptance to complete the questionnaire. Once the potential respondent had given verbal consent and permission to be a part of the study, questionnaires were administered by hand-delivery and then collected at a later date. This personal contact and delivery was to obtain a correct address, reduce mailing costs and increase response rate through a personal contact. The target response rate for this study was 384 resident respondents. Within human dimension studies, a sample size of 384 is sufficient to allow results to be generalized to the population with results considered accurate 19 times out of 20, plus or minus five percent (Vaske, 2008). Of the 502 questionnaires distributed, 389 were returned, yielding a response rate of 77%, which is acceptable for both the case study itself and the field as a whole.

In phase two, the sampling frame included all visitors to the city of Thompson and all youth in grades 11 and 12 of R.D. Parker Collegiate in the city of Thompson. Visitor participants were randomly selected at various visitor “hot spots” around the city including the Via Rail train station, Thompson airport, and participating hotels. Once the potential respondent had given verbal consent and permission to be a part of the study,

intercept questionnaires were administered. Of 352 approached visitors, 211 questionnaires were completed, yielding a response rate of 69%. Finally, Youth participants in grades 11 and 12 were recruited at R.D. Parker Collegiate, the local high school. Permission was obtained from the School District of Mystery Lake to implement the survey and consent by students was obtained with a completed questionnaire. A pass-out, pass-back method was administered. One hundred and ninety-one questionnaires were completed, yielding a response rate of 100%. The yield number of respondents allow us to make comparisons between the three groups regarding their attitudes, values, and behaviors toward wolves and the “Wolf Capital of the World” initiative.

1.4.2 Data Collection

Data were collected using an instrument administered to randomly selected residents, visitors, and youth of Thompson, Manitoba. The same self-administered, quantitative research instrument was administered to residents and youth, and a slightly varied instrument was administered to visitors. Visitors were defined as any person who resided outside of Thompson, Manitoba. Most of the items were close-ended questions that had been previously pre-tested to ensure reliability of attitudinal concepts and to ensure they were logical and unambiguous (Grimm 2010). By doing this, the accuracy and dependability of data also becomes increased (Colton & Covert 2007). The sections of the questionnaire included basic demographics, attitudes, values, beliefs, fear and management, risk perception and control, economic and behavioral intention, trust and credibility all regarding wolves and Thompson becoming the “Wolf Capital of the World”. A copy of both research instruments can be found in Appendix X.

1.4.3 Data Analysis

Data collected for this study was analyzed using SPSS v. 20 for Windows software, PCI₂ software (found at <http://warnercnr.colostate.edu/~jerryv/PCI2/index.htm>), and Lisrel software. Structural equation modeling (SEM) and the Potential for Conflict Index 2 (PCI₂) were used. SEM is a method that tests models based on theory (Anderson & Fulton, 2008). It distinguishes actual measured variables (observed) versus concepts that underlie these variables (latent) (Anderson & Fulton, 2008). In this case, it was used to reveal relationships between attitudes, values, and behaviors. The advantage of SEM is that it is a model-based analysis that encourages theoretical solutions to problems based on measured and latent variables simultaneously (Anderson & Fulton, 2008). By implementing the use of SEM, we facilitate the use of findings in developing management strategies for wolves and “Wolf Capital of the World” in Thompson. PCI₂ is a method developed by Vaske (2010) to understand where similarities or conflicts may lie between groups regarding a particular issue. As part of this study, we rely on the PCI to communicate possible differences between groups of local residents and of visitors to Thompson. By implementing the use of SEM and PCI, we can demonstrate how each can be used in unique situations to facilitate findings of human dimensions research. In using these two methods of analysis, we can discover where relationships may lie as well as where conflicts or disagreements may lie, which can also help future managerial decisions. Better decisions involving public input can increase the likelihood of success for Thompson as the “Wolf Capital of the World”.

1.5 Demographics

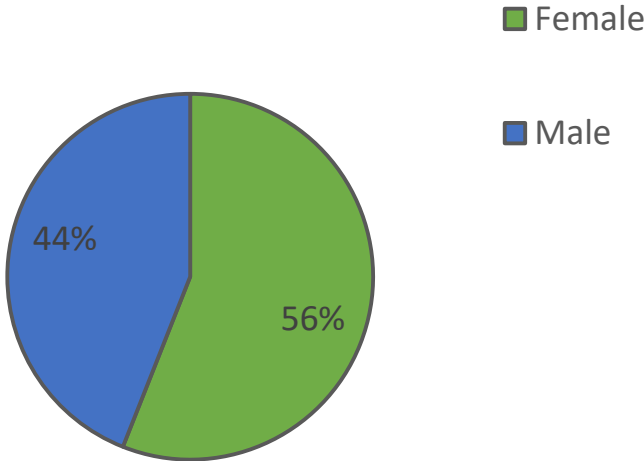


Figure 5. Gender Statistics from Resident Study (phase 1)

Of the residents that participated in our study (phase 1), 56% of respondents identified as female and 44% identified as male (Figure 5). This is comparable to the 2011 census data which states that the Thompson population is comprised of 49% female and 51% male.

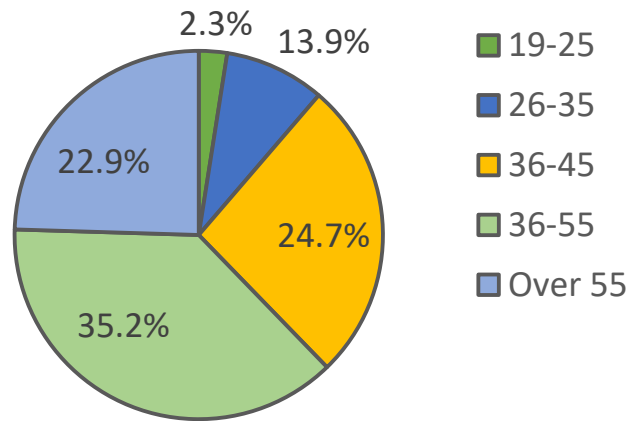


Figure 6. Age Statistics from Resident Study (phase 1)

In comparison to the 2011 census data, our sample age statistics were similar with the exception of the age group 19-25. Within our sample of residents (phase 1), only 2% of respondents were 19-25 (Figure 6). In contrast, the 2011 census data suggests that 9% of Thompson residents fall within this age group. This is why we decided to include youth residents of Thompson.

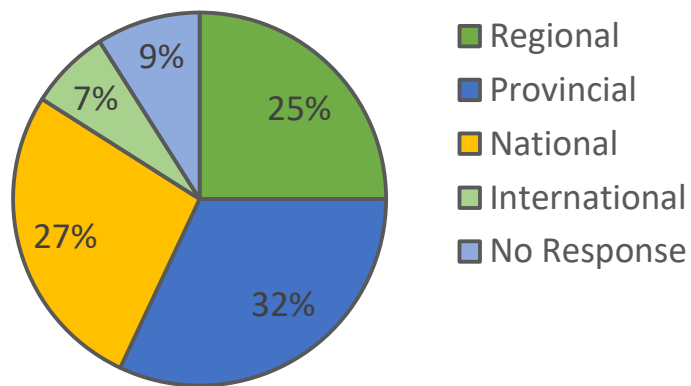


Figure 7. Visitor geographic locations

In phase two, we identified the geographic base of the visitors to Thompson. We defined a visitor as any person residing outside of the Thompson area. It is good to know where visitors are coming from because it gives us a clear direction for future research requirements, particularly if there exists educational targets or areas of conflict. The majority of visitors came from the regional (25%), provincial (32%), and national (27%) levels (Figure 7).

1.6 Intentions for Research Outcomes

We hope that this research will have benefits for the community, key players, and the academy:

Our intention is to create increased engagement in order to fulfill a communication gap between Spirit Way Inc. and the general population of Thompson. Our results will help guide further educational efforts and decisions regarding the future of Thompson. In order to better understand the views of Thompson residents, we have identified and documented attitudes, values, and behaviors of local residents, youth, and visitors. By understanding where differences and conflicts may lie, we can address issues surrounding wolves and the “Wolf Capital of the World” initiative, which should assist as the first step in any conflict resolution process initiated by decision-makers. Understanding key beliefs that are directly related to attitudes will help target educational messages and thus create a more informed public. Better decisions involving public input can increase the likelihood of success for Thompson as the “Wolf Capital of the World”.

Human dimensions is a field of social science that has a core focus on wildlife issues and wildlife management involving the understanding of attitudes and behaviours of individuals (Decker & Chase, 1997). The field of human dimensions uses both theoretical and applied methods to conceptualize, measure, and interpret variables and their relationships to create a range of management strategies and objectives, which can mitigate trade-offs between conservation initiatives and public values (Manfredo, Sneegas, Driver, & Bright, 1989; Manfredo, Vaske, & Teel, 2003; Decker & Enck, 1996). Within the field of human dimensions, there has never been a study focused on a wildlife capital of the world initiative, although other such initiatives exist including Churchill, Manitoba as the “Polar Bear Capital of the World”. Because this is the first human dimensions study to be conducted in an area regarding issues associated with this type of initiative, a study of attitudes, values, and behaviours can provide insight to potential conflicts, and attitudes toward potential management options. This research can also act as a baseline for future research regarding the “Wolf Capital of the World” initiative. The most important aspect of this research is to fulfill a communication gap between Spirit Way Inc. and the general population, therefore, it is essential that communication of potential conflict, risk perception, and attitudes toward these possible strategies and objectives is effective and efficient for the target audience (Manfredo, Vaske, & Teel, 2003). As mentioned in the study design and method, we will also be able to demonstrate how the theory of planned behavior, cognitive hierarchy model, structural equation modeling, and potential for conflict index can be used in unique situations to facilitate future human dimensions research and emphasize the importance of human involvement in wildlife and wildlife initiative management.

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2. Chapter Two

Wolves as a symbol of community: Wolf Capital of the World, Thompson, Manitoba

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2.1 Abstract

Wolves have been symbolized negatively throughout history (e.g., mystical powers, lone wolf). In an effort to reverse these negative stereotypes, Spirit Way Inc., a non-profit tourism organization, has been attempting to position Thompson, Manitoba, Canada as the “Wolf Capital of the World.” The long-term success of such an initiative, however, requires the support of local residents. We hypothesized that support for the initiative would increase among those who: (a) had a positive attitude toward wolves, (b) valued the existence of wolves in the area, (c) were willing to financially support the initiative, and (d) willing to participate in wolf-related activities. Data were obtained from a self-administered questionnaire that was distributed to a random sample of Thompson residents (n = 389, response rate = 77%). By examining the relationships between attitudes, values, and support for and toward the “Wolf Capital of the World” initiative, our model has shown that existence value is the highest predictor of support. Understanding what affects support for an initiative provides a foundation for educational efforts and helps to inform decisions regarding the future of wolves, wolf management, and the success of the “Wolf Capital of the World” initiative in Thompson, Manitoba.

Keywords: wildlife management, tourism, wolves, structural equation model

2.2 Introduction

Small, northern communities are increasingly relying on tourism development initiatives in order to increase economic diversity. New, successful tourism initiatives can provide several benefits to a small community. This can be said particularly for geographically isolated communities that are historically resource-dependent as they cycle through boom and bust cycles in search of a viable economic product (Johnston & Haider, 1993). This kind of tourism development initiative success is related to market readiness, revenue generation, and job creation (Colton, 2010). Tourism planning has undergone significant changes in terms of the approach to participatory development (Tosun, 2004). In order to increase positive attitudes toward the tourism initiative among the local residents (Tosun, 2000; Tosun 2004), increase local resident tolerance to tourism (Tosun, 2004), and ensure visitor satisfaction and benefits for local residents (Simmons, 1994; Tosun, 2004), it is beneficial for small communities to take a participatory development approach in order to gain the most benefit from their tourism initiative (Tosun, 2004). The term “community” is often signified by networks of individuals (Stone & Hughes, 2002; Colton, 2010) in a specific geographic location that share historical and cultural heritage (Hunt & Smith 2006; Colton, 2010), a common identity, and a common sense of place (Jamrozy & Walsh, 2008). The success of tourism initiatives heavily relies on the knowledge and support of the local population (Gursoy, D., Jurowski, C., & Uysal, M., 2002). Without the support of the local population, visitors may be reluctant to visit or re-visit a location where anger, apathy, and mistrust are apparent (Gursoy et al., 2002). Thus, ensuring that the entire

community is involved in tourism development can be essential to an initiative's success.

In relation to tourism, ecotourism-based initiatives have become an increasingly common source of economic development (Geffroy, 2015). In addition, wildlife has become an important factor in nature-based tourism and has also become common in research regarding the relationships between people and nature (Hill, Curtin, & Gough, 2014). It is common to see communities benefit from indigenous, iconic, and charismatic species in order to market and to develop tourism initiatives (Curtin, 2014). It is for this reason that when a tourism initiative is involving a wildlife species, attitudes, values, and behaviors toward this species need also be investigated.

Across many human-wildlife interaction scenarios, human dimension research has focused on acceptability of wildlife management actions (Vaske, Roemer, & Taylor 2013). The most basic use of information gathered from human dimension research is to aid wildlife managers in incorporating representative interests, attitudes, and values of the public either as a direct application, or as justification for a particular decision, which can be effective in securing long-term solutions best suited to resource-related issues (Vaske et al., 2013). Attitudes are evaluations that individuals have about an object or behavior (Rosenberg & Hovland, 1960) while existence values are perceptions of nature based on their intrinsic, 'desirable end states' (Schwartz, 1992) often formed through social interactions and typically shared by individuals within cultures and subgroups (Fulton & Manfredo, 1996). According to Rhoads (1999), one aspect of integrating research into these types of community-based decision making is the need to adjust field concepts in order to accommodate place-based contexts. Therefore, the

information gathered about attitudes and values toward a wildlife species or a tourism initiative through human dimension research can be translated to fit within the spectrum of any specific, community-based tourism initiative, particularly wildlife inclusive, ecotourism. The main focus of this research is acceptability of a wildlife-based, ecotourism initiative within Thompson, Manitoba, Canada, known as the “Wolf Capital of the World” initiative.

Wolves and humans have had a long history of conflict. The longer that wolves and people have coexisted, the more negative the perceptions of wolves seem to be (Dressel, Sandström, & Ericsson, 2015). These conflicts are often associated with livestock conflicts (Oakleaf, Mack, & Murray, 2003; Milhieras & Hodge, 2011), human safety issues (Thirgood, Woodroffe, & Rabinowitz, 2005; Johansson, Flykt, & Karlsson, 2012), pet safety issues (Olson et al., 2015), predation conflicts with hunters (Ericsson & Heberlein, 2003; Bruskotter & Fulton, 2012), and reintroduction conflicts (Ericsson & Heberlein, 2003). However, within Thompson, Manitoba, Spirit Way Inc., a not-for-profit, non-government organization (NGO) has been working with the wolf image to create new opportunities for the small, northern city. Thompson’s economy currently revolves around nickel mining, a finite resource and declining market (Spirit Way Inc., 2011). In addition, Thompson is considered the “Hub of the North”; individuals from surrounding communities travel to Thompson for health care, government administration offices, major transportation, and other services (Spirit Way Inc., 2011). This has created a need for Thompson to diversify their economy and re-shape their current image to attract new initiatives and investments in the city. Spirit Way Inc. visualize the wolf as an economic asset in diversifying Thompson’s economy and overcoming this challenge

(Spirit Way Inc., 2011). Spirit Way Inc. observed an increase in the number of visitors to a wolf mural created by them in the city that led them to realize the economic potential of wolves and thus made the decision to continue building attractions focused on the wolf image (Spirit Way Inc. 2011). Over the past several years, Spirit Way Inc. has been studying the possibility of developing a “wolf economy” within Thompson. Spirit Way Inc. hopes to develop this wolf economy in five areas: tourism, science and research, education, special events, and art (Spirit Way Inc. 2011). These factors could position Thompson as “Wolf Capital of Canada” and as Spirit Way Inc. has been expanding this wolf economy in Thompson, they have been working toward positioning the city as “Wolf Capital of the World” (Spirit Way Inc. 2011). Within Thompson, Manitoba, Canada, there is currently no quantitative and representative knowledge of whether or not public support exists for the project.

This research is based on the cognitive approach, which investigates values, attitudes, behavioral intentions, and actual behaviors arranged in a hierarchy (Vaske & Donnelly, 1999). By using this approach, one can predict and evaluate how people feel and what they will do in a human-wildlife interaction scenario (Fulton & Manfredi, 1996; Vaske & Donnelly, 1999; Manfredi, 2008). Similarly stated by Figari & Skogen (2011), ‘conflicts over wolves [in Thompson] are social conflicts’. Therefore, it is necessary to investigate attitudes, values, and behaviors of local residents toward wolves and the “Wolf Capital of the World” tourism initiative in order to gauge current support and to have a better understanding of an individual’s feelings and actions toward the “Wolf Capital of the World”. This information can influence future management decisions and

educational decisions made by Spirit Way Inc. (Heberlein, 1989) regarding such a tourism initiative whereby the interests of local residents are considered.

Often the challenge in human dimensions research is figuring out not only whether or not people intend to support a particular management decision, but also why (Vaske & Donnelly, 1999; Manfredi, 2008). Structural equation modelling was used as a way to demonstrate the relationships between factors that would determine which variables foster support of the “Wolf Capital of the World” initiative (Kline, 2011). Based on past research that shows a strong link between attitudes, values, and behaviors (Fishbein & Ajzen, 2010; Sponarski, Vaske, Bath, & Musiani, 2014), this research hypothesizes that:

H1: As existence value of wolves increase, willingness to pay for Thompson as “Wolf Capital of the World” will increase.

H2: As existence value of wolves increase, interest in visiting wolf exhibits and enclosures will increase.

H3: As existence value of wolves increase, support for Thompson as “Wolf Capital of the World” will increase.

H4: As attitudes toward wolves become more positive, willingness to pay for Thompson as “Wolf Capital of the World” will increase.

H5: As attitudes toward wolves become more positive, interest in visiting wolf exhibits and enclosures will increase.

H6: As attitudes toward wolves become more positive, support for Thompson as “Wolf Capital of the World” will increase.

H7: As willingness to pay for Thompson as “Wolf Capital of the World” increases, interest in visiting wolf exhibits and enclosures will increase.

H8: As willingness to pay for Thompson as “Wolf Capital of the World” increases, support for Thompson as “Wolf Capital of the World” will increase.

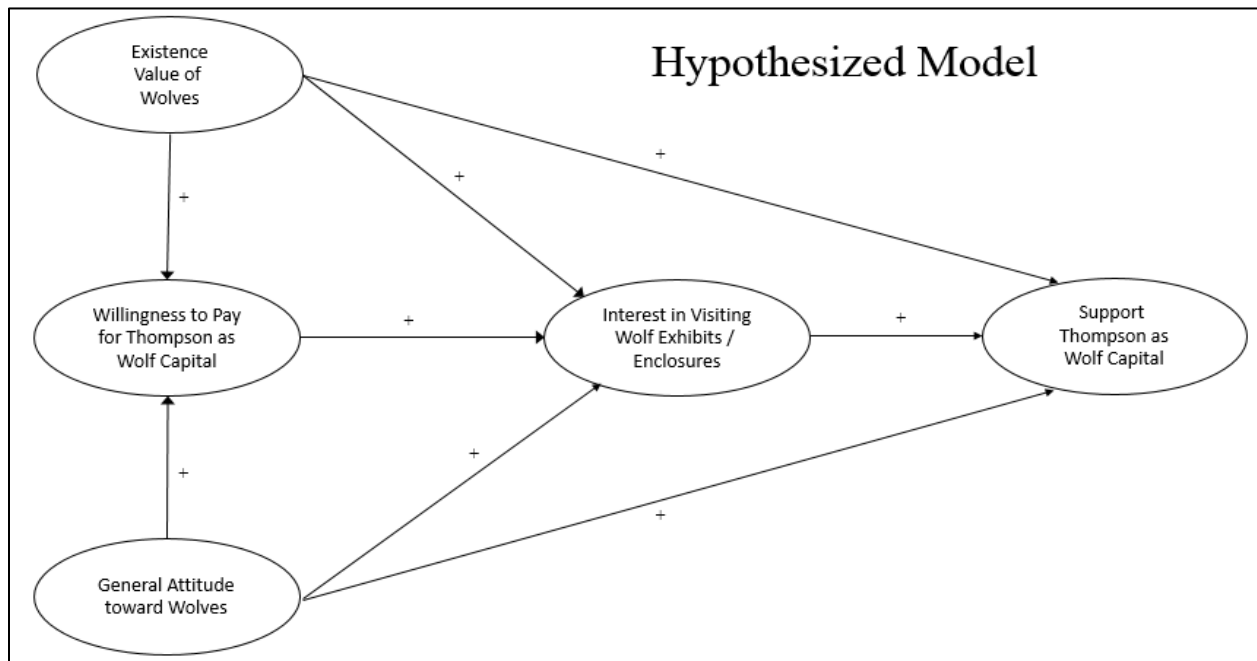


Figure 1. Hypothesized model for relationships between attitudes, values, and willingness to pay for Thompson as “Wolf Capital of the World”, interest in visiting wolf exhibits/enclosures, and support for Thompson as “Wolf Capital of the World”. Plus signs on the arrows signify the hypothesized relationships between each variable.

2.3 Methods

2.3.1 Study area

The study area included the city of Thompson located in central Manitoba, Canada. Historically, Thompson is a nickel mining town and as development in northern Manitoba has progressed, Thompson is now known as the “Hub of the North” (Thompson, 2014a). Individuals from surrounding communities travel to Thompson for

health care, education, and other services. For the past several years, Thompson has been labelled “Crime Capital of Canada” as it has been ranked number 1 of 297 cities in Canada for violent crime (Statistics Canada, 2012). This, combined with the downward spiral of the nickel market (Thompson, 2014b), has created a need for Thompson to diversify their economy and re-shape their current image as crime capital. Refocusing on wildlife, wilderness, and more specifically, wolves, is considered to be a possible direction for the city based on the perspective of Spirit Way Inc., a Thompson-based, non-government organization (NGO).

2.3.2 Sampling

The sampling frame included all residents within the city of Thompson listed in the current telephone directory; the study was implemented in July and August 2014. Participants were randomly selected from the local telephone directory and individuals with the ‘next birthday’ in each household were selected for the study. Once the potential respondent had given verbal consent and permission to be a part of the study, questionnaires were administered by hand-delivery and then collected three days later. This personal contact and delivery ensured a correct address, reduced mailing costs, and increased response rate through personal contact. Of those 502 respondents who agreed to participate in the study, the overall response rate was 77% (n=389).

2.3.3 Model Variables and Analysis

In creating the five latent variables, 16 items were taken from the survey: positive attitude toward wolves (one item), existence value of wolves (four items), economic participation in the “Wolf Capital of the World” initiative (three items), behavioral

participation in the “Wolf Capital of the World” initiative (three items), and support of the “Wolf Capital of the World” initiative (five items). Survey items were measured on a five-point scale ranging from strongly disagree (-2) to strongly agree (2) and were chosen based on previous studies involving similar subject matter.

Attitude (ATT) toward wolves was measured using the basic question adapted from Sponarski, Vaske, & Bath, 2015: (ATT_1) In general, how do you feel about wolves?

Existence value (EXV) of wolves was measured based on four questions adapted from Sponarski et al., 2015: (EXV_1) wolves have a right to exist in the Thompson area; (EXV_2) it is important for wolves to exist in the Thompson area for future generations; (EXV_3) Wolves are a part of Thompson culture; and (EXV_4) It is important to maintain wolves in the area surrounding Thompson.

Behavioral participation intention (BVR) was measured based on three questions adapted from Sponarski et al., 2015: (BVR_1) I would participate in educational activities about wolves and wolf encounters; (BVR_2) I would visit a wolf exhibit if available in Thompson; and (BVR_3) I would visit a wolf enclosure if available in Thompson.

Economic participation intention (ECM) was measured based on three questions adapted from Sponarski et al., 2015: (ECM_1) I would be happy for donated funds to be spent on Thompson becoming the “Wolf Capital of the World”; (ECM_2) I would be happy for taxpayer’s funds to be spent on Thompson becoming the “Wolf Capital of the World”; and (ECM_3) I would donate my own money to support Thompson becoming the “Wolf Capital of the World”.

Support of “Wolf Capital of the World” (SUP) was measured based on five questions adapted from Sponarski et al., 2015: (SUP_1) I would be proud to live in a city known as the “Wolf Capital of the World”; (SUP_2) becoming “Wolf Capital of the World” would be beneficial to Thompson; (SUP_3) the wolf image can bring visitors to Thompson; (SUP_4) Wolves can bring researchers to Thompson; and (SUP_5) wolves can generate economic opportunities for Thompson.

Confirmatory factor analysis was used to empirically verify the validity of the observed variables to be used within the model (Kline, 2011). Once validity was confirmed, standardized factor loadings were used to measure the impact of each observed variable on its matching latent concept. The internal consistency of each latent concept, ATT, EXV, SUP, BVR, and ECM were measured under Cronbach’s alpha (Vaske 2008). In order to measure the relationships between the latent variables and to determine support of “Wolf Capital of the World”, creation of a structural equation model was deemed most appropriate. Lisrel version 8.8 was used to fit the model using the covariance matrix and used goodness-of-fit indices to examine the fit of the model and to ensure it was acceptable. The indices used include chi-square ($\Delta \chi^2$, χ^2/df), comparative fit index (CFI; an acceptable CFI value is >0.90), root mean square error of approximation (RMSEA; an acceptable RMSEA value is between 0.05 and 0.08), and normed fit index (NFI; an acceptable NFI value is >0.95) (Hu & Bentler, 1999; Tabachnick & Fidell, 2013; Sponarski et al., 2014).

2.4 Results

In order to verify that all of the items were loaded on their relative constructed variables, confirmatory factor analysis was used ensuring factor loadings were ≥ 0.70 on

the latent variable (Table 1, Figure 2). Residents of Thompson have a positive attitude toward wolves (ATT_1: M = 0.86, S.D. = ± 0.89). The observed reliability for existence value (EXV) was 0.75. In general, Thompson residents agreed that wolves have a right to exist in the Thompson area (EXV_1: M = 1.25, S.D. = ± 0.10), that it is important for wolves to exist in the Thompson area for future generations (EXV_2: M = 1.19, S.D. = ± 1.06), that wolves are a part of Thompson culture (EXV_3: M = 0.81, S.D. = ± 1.16), and that it is important to maintain wolves in the area surrounding Thompson (EXV_4: M = 1.05, S.D. = ± 1.10). Behavioral participation of “Wolf Capital of the World” (BVR) had an observed reliability of 0.85. Residents are close to neutral about their willingness to participate in educational activities about wolf encounters (BVR_1: M = 0.25, S.D. = ± 1.08), close to neutral, but more positive about visiting a wolf exhibit if available in Thompson (BVR_2: M = 0.63, S.D. = ± 1.09), and close to neutral about visiting a wolf enclosure if available in Thompson (BVR_3: M = 0.17, S.D. = ± 1.23). Economic participation of “Wolf Capital of the World” (ECM) variables had a reliability of 0.76. Thompson residents were neutral about donated funds to be spent on “Wolf Capital of the World” (ECM_1: M = 0.05, S.D. = ± 1.21), and negative about taxpayer funds being used (ECM_2: M = -0.67, S.D. = ± 1.25) and donating their own money (ECM_3: M = -0.52, S.D. = ± 1.24) to support “Wolf Capital of the World”. Finally, the reliability of Support for “Wolf Capital of the World” was 0.90. For the most part, residents were between neutral and in agreement that they would be proud to live in a city known as “Wolf Capital of the World” (SUP_1: M = 0.61, S.D. = ± 1.07), that becoming “Wolf Capital of the World” would be beneficial to Thompson (SUP_2: M = 0.82, S.D. = ± 1.00), that the wolf image can bring visitors to Thompson (SUP_3: M = 0.94, S.D. =

±1.01), that wolves can bring researchers to Thompson (SUP_4: M = 1.24, S.D. = ±0.86), and that wolves can generate economic opportunities for Thompson (SUP_5: M = 0.96, S.D. = ±0.92).

Table 1. Indicators for attitude toward wolves, existence value of wolves, support of “Wolf Capital of the World”, behavioral participation intention, and economic participation intention. Questions were based on a five-point Likert scale where -2 was strongly disagree, -1 was disagree, 0 was neutral, 1 was agree, and 2 was strongly agree.

Variable Code	Mean	Standard Deviation	Cronbach's alpha if deleted	Cronbach's alpha
ATT_1 (attitude)	0.86	0.89		
EXV_1 (value)	1.25	0.10	0.69	0.75
EXV_2	1.19	1.06	0.68	
EXV_3	0.81	1.16	0.76	
EXV_4	1.05	1.10	0.64	
BVR_1 (behavior)	0.25	1.08	0.78	0.85
BVR_2	0.63	1.09	0.85	
BVR_3	0.17	1.23	0.72	
ECM_1 (economic)	0.05	1.21	0.73	0.76
ECM_2	-0.67	1.25	0.54	
ECM_3	-0.52	1.24	0.77	
SUP_1 (support)	0.61	1.07	0.90	0.90
SUP_2	0.82	1.00	0.86	
SUP_3	0.94	1.00	0.88	
SUP_4	1.24	0.86	0.88	
SUP_5	0.96	0.92	0.88	

The fit indices for the multiple regression structural equation model were satisfactory ($\chi^2 = 452.34$, $df = 94$, $\chi^2/df = 4.81$, $RMSEA = 0.099$, $CFI = 0.957$, and $NFI = 0.946$). Our model gives an insight to understanding the reasons why residents may support a wildlife-capital initiative. As indicated by the directional arrows in figure 2, six

of the eight hypotheses were supported by the findings: H1, H3, H5, H6, H7, and H8. Existence value was a strong predictor of willingness to pay for Thompson as “Wolf Capital of the World” ($\beta = 0.37, \rho < 0.05$) and of support for Thompson as “Wolf Capital of the World” ($\beta = 0.45, \rho < 0.05$). General attitude toward wolves was a weaker predictor of support for Thompson as “Wolf Capital of the World” ($\beta = 0.21, \rho < 0.05$) and of interest in visiting wolf exhibits and/or enclosures ($\beta = 0.24, \rho < 0.05$). Willingness to pay for Thompson as “Wolf Capital of the World” was a strong predictor of interest in visiting wolf exhibits and/or enclosures ($\beta = 0.72, \rho < 0.05$). Finally, Interest in visiting wolf exhibits and/or enclosures was a strong predictor of support for Thompson as “Wolf Capital of the World” ($\beta = 0.46, \rho < 0.05$). Willingness to pay for Thompson as “Wolf Capital of the World”, interest in visiting wolf exhibits and/or enclosures, and support for Thompson as “Wolf Capital of the World” explained 14%, 74%, and 65% of variance respectively. Attitude toward wolves was not an indicator of willingness to pay for Thompson as “Wolf Capital of the World” and existence value was not an indicator of interest in visiting wolf exhibits or enclosures.

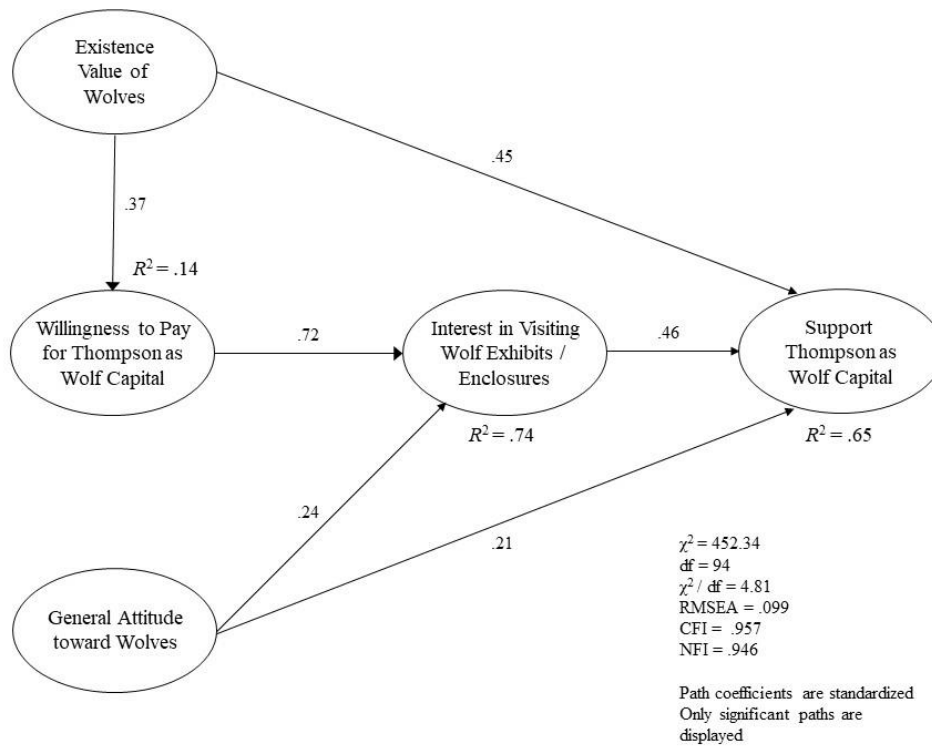


Figure 2. Multiple regression structural equation model demonstrating the factors that affect support for Thompson as “Wolf Capital of the World”. Path coefficients are standardized.

2.5 Discussion

By examining the relationships between attitudes, values, and support for and toward the “Wolf Capital of the World” initiative, the model has shown that existence value is the highest predictor of support. Existence value gives meaning to a particular resource (Kluckhohn, 1951; Vaske & Donnelly, 1999) like the wolf. This means that for residents, the wolf is perceived to have strong intrinsic value for Thompson and/or Thompson culture. This type of place-based value is essential for Spirit Way Inc. as the primary decision-maker of the “Wolf Capital of the World” initiative to incorporate into

their future endeavours. It is intriguing that the existence value that residents hold for the wolf contributes to their support of an initiative rather than attitude. In traditional human dimension work, a wildlife capital initiative or concept has not been studied and these results can therefore guide new initiatives when the opportunity for a wildlife centre arises. These results suggest that value persuasive messages focused on existence values of a species may be more important than traditional messages focused on beliefs or facts that could influence attitudes.

Wildlife-based tourism has the potential to play a leading role in rural regions (Geffroy, 2015) and the wolf image can offer development of a niche market in Thompson (Murphy, 1993). Particularly when Thompson is experiencing a bust in the nickel market, tourism can present a myriad of opportunities for Thompson (Johnston & Haider, 1993). Community tourism is considered highly beneficial for both the community itself and the tourism market (Murphy, 1993). The process of community tourism planning promotes a grassroots approach; this is similar to Spirit Way Inc.'s "Wolf Capital of the World" initiative and is meant to encourage the local population to become involved in the types of attractions that stem from the initiative including murals, statues, and playgrounds (Murphy, 1993). By holding a commitment to the positive tourism marketing of the wolf, a sense of place can be fostered by both Spirit Way Inc. and the residents of Thompson (Murphy, 1993). When a strong sense of place and pride exists, visitors are more likely to be satisfied, resulting in successful tourism initiatives (Hall, C.A.S., Jones, P.W., Donovan, T.M., & Gibbs, J.P., 2000; Roberts & Hall, 2001; Iorio & Corsal, 2010).

Of course, it is also ideal to ensure that ecotourism initiatives remain relevant to the public. If the “Wolf Capital of the World” initiative is not relevant to the people of Thompson, the initiative will also become irrelevant to other groups of interest such as city elect members (Wilkinson, 2000). The local public should be enthusiastic about the initiative and feel a sense of connection with the initiative (Wilkinson, 2000). Wildlife management has increasingly taken a locally focused approach (Leong, 2009; Pomeranz, 2014). By combining human dimension research and a locally based wildlife management approach (Decker, Raik, & Siemer, 2004; Pomeranz, 2014), the public can become more engaged in the research process, which will in turn create a positive atmosphere surrounding the “Wolf Capital of the World” initiative.

The logical next step of this research is to explore similarities and differences in attitudes, values, and behaviors of varying populations (e.g. visitors, youth). By identifying any differences in attitudes, values, and behaviors, it is possible to explore the nature or type of conflicts and where conflicts or disagreements may lie, which should assist as the first step in any conflict resolution process initiated by decision-makers (Bath, 1998). In addition, it is imperative that the decision-makers, in this case, Spirit Way Inc., understand the results of this research project. Understanding key beliefs that are directly related to attitudes will help target educational messages and thus create a more informed public (Bath, 1998). Better decisions involving public input can increase the likelihood of success for Thompson as the “Wolf Capital of the World”.

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3. Chapter Three

Bridging the Gap: Using the Potential for Conflict Index as a Tool for Intellectual
Accessibility.

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3.1 Abstract

Understanding the thoughts and actions of the public toward wildlife-based initiatives is essential for gauging support for the initiative and corresponding management actions. Evidence shows that decision-makers and stakeholders are becoming more interested in the social science aspect of their initiatives. Therefore, it is necessary to ensure that the decision-maker has a clear understanding of the thoughts and actions of the public toward such aforementioned initiatives. Unfortunately, there is little guidance to help researchers design and implement strategies to facilitate knowledge exchange. Spirit Way Inc., a not-for-profit tourism infrastructure project, has been positioning Thompson, Manitoba, Canada as the “Wolf Capital of the World.” The social feasibility of the “Wolf Capital of the World” initiative was assessed using a self-administered questionnaire that was randomly distributed to residents, youth, and visitors representing the city of Thompson. The questionnaire focused on comparing attitudes, beliefs, values, fear, and risk perception toward wolves, wolf management, and the “Wolf Capital of the World” initiative. As the decision-maker of the “Wolf Capital of the World” initiative, it is important for Spirit Way Inc. to understand the results of the human dimensions study. The purpose of this research is to produce transformational learning in Spirit Way Inc. in order to increase knowledge mobilization and the solution to creating intellectual accessibility of the results in this instance is the use of the Potential for Conflict Index 2 (PCI₂). The PCI₂ is a tool that has been used in human dimensions research in a variety of capacities to assist in increasing understanding from management. The PCI₂ illustrated clear differences between and among the groups in terms of both average ratings and the amount of consensus. PCI₂ allows Spirit Way Inc. to understand where similarities and differences exist and to provide a foundation for educational efforts and an aid for informing decisions regarding the future of wolves, wolf management, and the “Wolf Capital of the World” initiative in Thompson, Manitoba.

Keywords: wildlife management, tourism, transformational learning, intellectual accessibility, Potential for Conflict Index

3.2 Introduction

Wolves are considered to be a charismatic carnivore (Kellert, Black, Rush, & Bath, 1996; Wilson & Bruskotter, 2009; Linnell, Swenson, Andersen, & Barnes, 2000) and have been key in influencing conservation and tourism initiatives (Glikman, Vaske, Bath, Ciucci, & Boitani, 2011). However, management of large carnivores, including wolves, is often controversial, particularly in urbanized areas where wolves reside in close proximity to human activity (Ericsson & Heberlein, 2003; Karlsson & Sjöström, 2007). It is for this reason that understanding the thoughts and actions of the public toward wolf-related initiatives is essential for gauging support for the initiative, which may influence future management decisions (Wilson & Bruskotter, 2009; Glikman et al., 2011; Vaske & Manfredi, 2012). A decision-maker's interest in research of public attitudes and actions based on these issues is rooted in their desire to understand, predict, and influence the public's behavior in wildlife-related (or wolf-related) issues (Decker & Chase, 1997; Vaske & Manfredi, 2012). Therefore, it is necessary to ensure that the decision-maker also has a clear understanding of the thoughts and actions of the public toward such aforementioned initiatives.

Researchers and decision-makers are both aware that it is beneficial to exchange knowledge between each other and other key groups, however, despite the efforts being made to integrate science into decision-making processes, this continues to be a challenge (Cvitanovic, Hobday, Kerkhoff, Wilson, Dobbs, & Marshall, N., 2015). Accessibility of research is imperative in bridging research, policy, and the public (Burnett, Jaeger, & Thompson, K., 2008), so if research is not easily understood by its intended audience, it will not travel, which fails to make change or improvement in a

given scenario (Cvitanovic, C. et al., 2015). Unfortunately, there is little guidance to help researchers design and implement strategies to facilitate knowledge exchange (Cvitanovic, C. et al., 2015).

Intellectual accessibility is defined as a person's ability to obtain information, intellectually comprehend the information, and to socially accept that the information is valid (Burnett et al., 2008). It is possible that someone may not accept certain information if it is delivered in such a way that the information is not understood or if it conflicts with their own political or religious beliefs (Burnett et al., 2008). It is for this reason that recognizing how research is communicated to various audiences can be influential in how research is used (Burnett et al., 2008). Within the field of human dimensions of wildlife, researchers often strive to work with decision-makers in order to make changes or improve decision-making. Transformational learning, as described by Simsek (2012), is a process of in-depth, constructive learning that develops meaning in the lives of learners – in this case, decision-makers or public. This type of learning can result in a change of one's worldview and create a reflective or conscious learning experience (Mezirow, 1978; Simsek 2012) – in other words, it can produce an “aha” moment, where the learner is able to understand something they previously could not. In addition, transformational learning has the ability to change one's thoughts, feelings, perspectives, beliefs, and behaviors because it alters our way of thinking or way of being involving a new paradigm of learning and living (Mezirow, 1978).

In relation to intellectual accessibility and transformational learning, the cognitive approach, frequently used in the field of human dimensions of wildlife, can also aid in understanding attitudinal conflict among individuals and groups regarding wildlife and

wildlife initiatives, and whether or not this conflict can be resolved (Vaske & Manfredro, 2012). It is through this understanding that researchers can determine how attitudes differ between groups and whether or not these attitudes influence behavior (Vaske & Manfredro, 2012). Making this type of research accessible to a wide range of interest groups responsible for ecotourism related initiatives can be essential in successfully communicating research results and mitigating any attitudinal conflict that may exist. This research suggests that adapting certain methods to facilitate transformational learning can be useful to human dimensions research as well as other types of research where decision-makers are involved.

Spirit Way Inc. is an NGO based out of Thompson, Manitoba, Canada and are considering wolves an economic opportunity in a variety of ways. They want to create an initiative that the city of Thompson can be proud of (Spirit Way Inc., 2011). This NGO is diligently working toward positioning Thompson as “Wolf Capital of the World”. Thompson’s economy is currently revolved around nickel mining, a finite resource and declining market (Spirit Way Inc., 2011). Spirit Way Inc. visualize the wolf as an economic asset in diversifying Thompson’s economy and overcoming the challenge of diversifying Thompson’s economy (Spirit Way Inc., 2011). The goal of human dimensions of wildlife is to conceptualize, measure and interpret variables and their relationships in a way that has meaning for problems of managerial, scientific, or public interest (Manfredro, Vaske, & Teel, 2003; Sponarski et al., 2015). In this context, this research uses human dimensions to understand how Thompson residents, visitors, and youth feel about wolves and about the “Wolf Capital of the World” initiative. This project is unique to the field as it is focused on an initiative based on the concept of wildlife

rather than the wildlife itself – something that is not often studied in human dimensions research.

As the decision maker of the “Wolf Capital of the World” initiative, it is important for Spirit Way Inc. to understand the results of this study. As previously mentioned, often the challenge in human dimensions research is communicating the meaning of abstract statistics, like standard deviation and standard error, for measuring consensus (Manfredo, Vaske, & Teel, 2003; Vaske, Beaman, Barreto, & Shelby, 2010). Unless one is skilled in the area of statistics, looking at a display of numbers and letters is not effective in communicating key results, thus, reducing intellectual accessibility. This dimension of accessibility of knowledge creates a level of engagement in wildlife management with decision makers and public networks that can enhance the strength of research understanding and mobility. One way of achieving this, is by employing easy-to-interpret statistics. The solution in this instance is to use the Potential for Conflict Index 2 (PCI₂), most recently developed by Vaske et al. in 2010.

The Potential for Conflict Index 2 (PCI₂) was developed to address the issue of communication between research and decision makers (Vaske et al., 2010). The PCI₂ has the potential to induce transformational learning and to produce an “aha” moment, again, where the learner can understand something they previously could not. PCI₂ results are generally displayed using graphs with bubbles that indicate potential conflict or consensus regarding a particular variable. A small bubble (with a PCI₂ value 0.0) represents high consensus while a larger bubble (with a PCI₂ value 1.0) represents high conflict. In addition, the position of the bubble on the vertical axis represents the mean response of the corresponding group. A bubble that rests higher on the axis indicates a

positive response, central on the axis indicates a neutral response, and lower on the axis indicates a negative response. By using this graphic display, research results can be more easily understood by decision makers. In this case, Spirit Way Inc. is interested in differences in attitudes between residents, youth, and visitors and by producing a PCI_2 graph to display such results, this understanding can be better facilitated.

PCI_2 has been used in various ways in wildlife and tourism management: to understand acceptability of different management options regarding carnivores (Sponarski et al., 2015), other mammals (Koichi et al., 2013; Vaske & Donnelly, 2007), acceptance of wildlife (Thornton and Quinn, 2009), with regard to disease (Needham, Vaske, & Manfredi, 2004), and in recreation studies (Heesemann et al., 2009). The purpose of using PCI_2 in this research is to help Spirit Way Inc. better understand attitudinal differences between residents, youth, and visitors. Based on previous research, this research hypothesizes the following:

H₁: Support for Thompson as “Wolf Capital of the World” differs between residents, youth, and visitors

H_{1a}: Residents will disagree that Thompson should be “Wolf Capital of the World”

H_{1b}: Youth will be neutral about whether or not Thompson should be “Wolf Capital of the World”

H_{1c}: Visitors will agree that Thompson should be “Wolf Capital of the World”

H₂: Support for Thompson as “Wolf Centre of Excellence” differs between residents, youth, and visitors

H_{2a}: Residents will disagree that Thompson should be a “Wolf Centre of Excellence”

H_{2b}: Youth will be neutral about whether or not Thompson should be a “Wolf Centre of Excellence”

H_{2c}: Visitors will agree that Thompson should be a “Wolf Centre of Excellence”

H₃: Willingness to pay to support “Wolf Capital of the World” differs between residents, youth, and visitors

H_{3a}: Residents will be unwilling to donate money to support “Wolf Capital of the World”

H_{3b}: Youth will be neutral about donating money to support “Wolf Capital of the World”

H_{3c}: Visitors will be willing to donate money to support “Wolf Capital of the World”

H₄: Willingness to participate in wolf-related activities differs between residents, youth, and visitors

H_{4a}: Residents will be unwilling to participate in wolf-related activities

H_{4b}: Youth will be neutral about participating in wolf-related activities

H_{4c}: Visitors will be willing to participate in wolf-related activities

3.3 Methods

3.3.1 Study area

The research study area was located in the city of Thompson. The economic basis of Thompson was built around a nickel mine, but as nickel has been decreasing in demand, Thompson has become a service centre for surrounding communities and has been labelled “Hub of the North” (Thompson, 2014a). Individuals travel to Thompson from their home communities for health care, government services, education, and other related services. Between 2009 and 2015, Thompson has been listed as the

“violent crime capital of Canada”, ranking number 1 of 297 cities in Canada (Statistics Canada, 2012). The violent crime image combined with the downward spiral of the nickel market (Thompson, 2014b), has created a need for Thompson to diversify its economy and to improve their current image as a violent crime capital.

3.3.2 Sampling

The sampling frame included three major groups: Thompson residents, Thompson resident youth, and seasonal visitors to Thompson. For all three groups the same questionnaire was administered with questions focused on a variety of aspects of human dimensions regarding wolf issues such as attitudes, fear, risk perception, and credibility. For this particular analysis, attitudes, beliefs, and behaviors were observed as support indicators for the “Wolf Capital of the World” initiative.

Thompson residents were chosen as the primary study group because it is ideal to start investigating attitudes, values, and behaviors from the core of the initiative and to spatially move outward from there. All residents within the city of Thompson listed in the current telephone directory were included in the study implemented in July and August 2014. Participants were randomly selected from the local telephone directory and individuals with the ‘next birthday’ in each household were selected for the study. Once the potential respondent had given verbal consent and permission to be a part of the study, questionnaires were administered by hand-delivery and then collected three days later. Personal contact and delivery ensured a correct address, reduced mailing costs, and increased response rate through personal contact. Of those 502 resident respondents who agreed to participate in the study, the overall response rate was 77% (n=389).

Within our sample, only 2% of respondents were between the age of 19 and 35. In contrast, the 2011 census data suggests that 9% of Thompson residents fall within this age group. This is why it was necessary to survey Thompson resident youth. Participants were selected from grades 11 and 12 at the local high school once the school board of Thompson had given formal permission for the study to be implemented. Questionnaires were administered by classroom teachers in a hand-out, hand-back fashion. This allowed us a response rate of 100% (n=191).

Finally, a third comparison group was added to this study because it made sense to start initial surveying of visitors to Thompson as they are likely to be the population supporting the “Wolf Capital of the World” initiative economically in the future. Visitors were defined as any person who resides outside of the city of Thompson. Participants were randomly selected at visitor “hot spots” including the Thompson airport, VIA Rail train station, and other tourism-related attractions. Once permission was granted, an intercept survey was implemented. Of those visitors approached, the study yielded a response rate of 69% (n=211).

3.3.3 Variables

The main goal of this analysis was to demonstrate how to reduce the “understanding gap” (Manfredo, Vaske, & Teel, 2003) between researchers and managing groups. Four variables from the questionnaire were chosen to be displayed in the PCI graph: (1) Thompson should be “Wolf Capital of the World”, (2) Thompson should be a “Wolf Centre of Excellence” [asking whether or not Thompson should be a “Wolf Centre of Excellence” was a way to determine if participants would be interested in a wolf initiative that did not have the title of “capital”], (3) would donate money to

support “Wolf Capital of the World”, (4) would participate in wolf related activities. Participants were asked to rank each of these statements based on a five-point Likert scale ranging from strongly disagree (-2), to (-1) disagree, to (0) neutral, to (1) agree and, to strongly agree (2). Each of these variables were chosen based on their importance to the managing party (Spirit Way Inc.) and results from all three sample groups (resident, visitor, and youth) were included.

3.3.4 Analysis

Before creating the PCI graph, we used SPSS for Windows v. 20 to complete a one-way analysis of variance (ANOVA) to compare mean responses of residents, visitors, and youth for each of the four chosen variables. Effect size measures were taken into account for each of the responses, and then Bonferroni post hoc tests were used to determine significant differences among groups and Tamhane post hoc tests for groups with heterogeneity of variance. After the ANOVA was completed, PCI₂ software developed by Vaske et al. (2010) (<https://sites.warnercnr.colostate.edu/jerryv/potential-conflict-index/>) was used to produce the graphic display.

3.4 Results

In considering whether or not Thompson should be “Wolf Capital of the World”, all three groups neutral with visitors being more in agreeance than residents and both more in agreeance than youth (visitor \bar{x} =0.54, resident \bar{x} = 0.48, youth \bar{x} = 0.32). Mean responses between all three groups differed significantly ($P < 0.05$)(table 1). For whether or not Thompson should be a “Wolf Centre of Excellence”, residents agreed (resident \bar{x} = 0.70) while visitors and youth were closer to neutral, visitors being closer to

disagree (visitor \bar{x} = -0.50, youth \bar{x} = 0.20). Again, mean responses between all three groups differed significantly ($P < 0.05$)(table 1). When asked whether or not participants would donate money to support “Wolf Capital of the World”, all three groups were neutral with resident and youth being closer to disagree and visitor being closer to agree (resident \bar{x} = -0.52, youth \bar{x} = -0.74, visitor \bar{x} = 0.30). There was no significant difference between all three groups ($P > 0.05$)(table 1). Finally, when asked if participants would participate in wolf related activities, residents and youth were neutral (resident \bar{x} = 0.25, youth \bar{x} = 0.02) and visitors were closer to disagree (visitor \bar{x} = -0.64). Again, there was no significant difference between all three groups ($P > 0.05$)(table 1). The effect sizes (η) for all four variables were small (table 1)(Vaske et al., 2010).

Table 3.1. One-way analysis of variance comparisons between residents, visitors, and youth for four variables relating to the study of the “Wolf Capital of the World” in Thompson, Manitoba conducted in 2015. Superscripts a, b, and c demonstrate significant differences between means.

Survey item	Resident	Visitor	Youth	F value	P value	Eta (η)
Thompson should be “Wolf Capital of the World”	0.48 ^b	0.32 ^a	0.54 ^b	89.20	0.00	0.13
Thompson should be a “Wolf Centre of Excellence”	0.70 ^b	-0.50 ^a	0.20 ^a	11.22	0.00	0.02
I would donate money to support “Wolf Capital of the World”	-0.52 ^a	0.30 ^a	-0.74 ^a	1.21	0.27	0.00
I would participate in wolf related activities	0.25 ^a	-0.64 ^b	0.02 ^a	0.42	0.52	0.00

After the ANOVA was completed, a PCl_2 graph was created (figure 1) using software developed by Vaske et al., (2010) and visually displayed what can be concluded from the ANOVA.

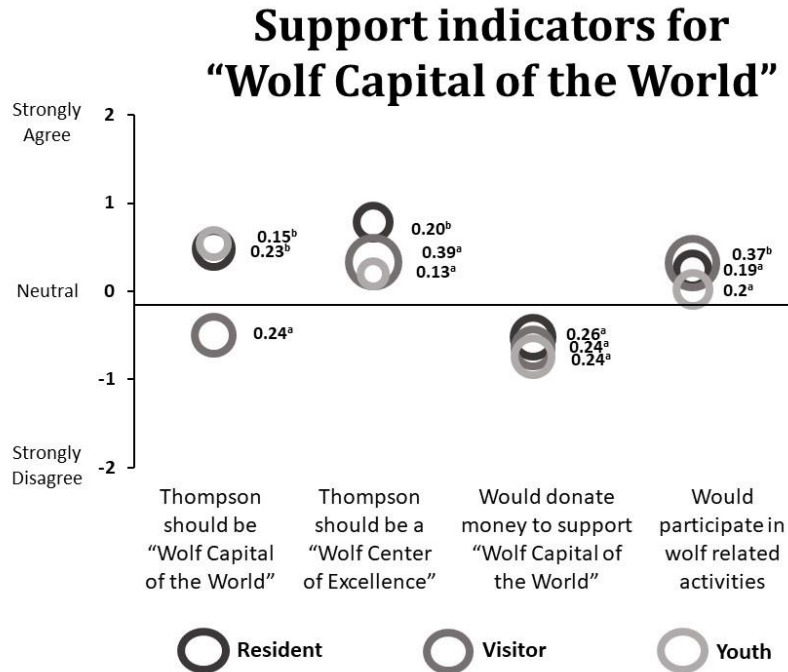


Figure 3.1. Mean response for residents, visitors, and youth with Potential for Conflict Index 2 (PCI₂) values for four variables relating to the study of the “Wolf Capital of the World” in Thompson, Manitoba conducted in 2015. Significant difference in PCI₂ values between the three groups are presented in the superscript letters (a, b).

Varying levels of support for the “Wolf Capital of the World” initiative between target groups were observed, which supports hypothesis H₁. More specifically, supporting H_{1a} that states residents will disagree, H_{1b} that states youth will be neutral, and finally H_{1c} that states visitors will agree that Thompson should be “Wolf Capital of the World”. There were also varying levels of support for Thompson as “Wolf Centre of Excellence”, which supports hypothesis H₂. As expected in H_{2b}, youth were neutral, however, what was unexpected was that residents agreed while visitors disagreed that Thompson should be a “Wolf Centre of Excellence”, which does not support hypotheses H_{2a} and H_{2c} that state the opposite: residents would be negative and visitors would be positive. Willingness to pay to support Thompson as “Wolf Capital of the World” had

varying levels of support, which supports hypothesis H₄. The results show that youth were least likely to be willing to donate money, which is counter to hypothesis H_{3b} that states youth would be neutral about donating money. This is followed by residents, which is counter to hypothesis H_{3a} that states residents would be unwilling to donate money. Finally, this is followed by visitors, which supports hypothesis H_{3c} that states visitors would be willing to donate money to “Wolf Capital of the World”. There were varying levels of willingness to participate in wolf-related activities, which supports hypothesis H₄. Youth were neutral about participation, which supports hypothesis H_{4b}. However, residents were more willing to participate while visitors were less willing to participate, which does not support hypotheses H_{4a} and H_{4c}, which state that residents would be unlikely and that visitors would be likely to participate in wolf-related activities.

3.5 Discussion

The field of human dimensions has explored attitudes toward controversial wildlife before, but what makes this project unique is the exploration of the aspects of wildlife-related tourism initiatives based on large carnivores within communities. While trying to understand why people support or oppose such an initiative is often challenging, it is definitely meaningful to give them a chance to express whether they do and/or why for the purpose of community involvement and democracy (Murphy, 1993; Decker & Chase, 1997). It is also beneficial to explore the similarities and differences between various groups to allow for targeted educational efforts and management decisions (Vaske & Manfredi, 1996; Decker & Chase, 1997). This is why intellectual accessibility should be considered in this type of wildlife or tourism-related research.

Evidence shows that decision-makers are becoming more interested in the social science aspect of their initiatives (Vaske & Manfredi, 2012). As managers of wildlife or decision makers in tourism-related initiatives become more interested in the social aspect of wildlife management and decision making, it will be increasingly obvious of the need for accessible human dimensions of wildlife research as well as other types of research.

It is beneficial to exchange knowledge between key groups and to integrate science into decision-making processes, and it can be useful for human dimensions researchers to think about transformational learning as a way to help decision makers and/or other interest groups understand research results. This means considering different ways to increase the accessibility of research, which could improve understanding of research and in-turn give the research meaning for its intended audience. Creating that “aha” moment where the learner is able to understand something they previously could not, could create a shift in the way managers think about research and their ability to use research results in a meaningful way. By combining the idea of transformational learning with the cognitive approach that is frequently used in human dimensions of wildlife, this research attempts to bridge the gap in understanding between human dimensions researchers and the decision makers that they work with. For the “Wolf Capital of the World” initiative, results from the research were demonstrated using PCI₂, a tool that has been used in human dimensions research in a variety of capacities. PCI₂ facilitates understanding of research by communicating abstract statistics in an easy-to-understand graphic display (Vaske et al., 2010; Sponarski et al., 2014). Understanding by decision makers can then

translate into understanding by stakeholders and the public. It is the goal of this research that the use of PCI₂ will encourage transformational learning in Spirit Way Inc. and will again, improve their problem solving and decision making skills. The purpose of using PCI₂ in this research is to help Spirit Way Inc. better understand attitudinal differences between residents, youth, and visitors.

Using the PCI₂, we looked at whether or not individuals believe Thompson should be the “Wolf Capital of the World”, so we see that the resident and youth bubbles are above the neutral line, indicating that both groups agree with this statement and the visitor bubble is below the neutral line, indicating that visitors disagree with this statement. We also see that the bubbles are smaller and the PCI values closer to zero, indicating less conflict and more consensus. This result is intriguing to us as we expected residents to disagree and visitors to agree with this statement. We then looked at whether or not individuals believe Thompson should be a “Wolf Center of Excellence”. All three bubbles are above the neutral line, indicating that all three groups agree with this statement. The groups of residents and youth have smaller bubbles and smaller PCI values, indicating more consensus than the visitors who have a larger bubble and a larger PCI value. Next, we asked residents whether or not they would donate money to support Thompson becoming “Wolf Capital of the World”. All three bubbles are below the neutral line and are small with small PCI values indicating all three groups disagree with consensus. Finally, we asked residents whether or not they would participate in wolf related activities. All three groups agree, with residents and youth having more consensus than visitors. Our findings are unusual as it conflicts with our hypothesis that residents would be more negative and visitors would be positive.

The above graph shows that visitors tend to have less consensus and less support for Thompson becoming the “Wolf Capital of the World”, which is not what we hypothesized. In addition, residents are positive and concise in their thinking – also not what we hypothesized – again, making these results different than previous human dimensions of wildlife research.

As this research moves forward after exploring the local resident attitudes, similar to consideration of other resource issues, the next step is to see how individuals in surrounding areas feel about this initiative and continue into a broader standpoint. In addition, there is a need for better understanding regarding why visitors are not supportive of this initiative, which is perhaps where the future focus of the bigger project lies. This could be due to visitor motivations and purposes for visiting Thompson. Furthermore, the highest potential for conflict among the three groups were observed for visitors across all four management options. This indicates that the visitors to Thompson is a heterogeneous group, potentially seeking different types of experiences. A further investigation of visitor characteristics and attitudes would allow for further exploration of these differences. It is also possible that the “Wolf Capital of the World” initiative could attract an entirely different type of visitor, which would warrant further study of visitors. With regard to youth, general neutral attitudes toward all four variables were observed. This could be attributed to the lack of knowledge about the initiative or a general lack of care with regard to wolf conservation and ecotourism, or the potential economic development opportunities of Thompson. As more data is collected from various groups, the PCI₂ can be used to compare attitudes among groups and to maintain intellectual accessibility of this research project. It would also be interesting to

delve into the ways in which Spirit Way Inc. is using knowledge gained through accessible research results (e.g. PCI₂) and whether or not their understanding of research results will influence their decision-making regarding the “Wolf Capital of the World” initiative. In addition, investigating whether or not this translates into success for the “Wolf Capital of the World” initiative could be a turning point for human dimensions research and realizing the need for accessible research within the field.

3.6 Management Implications

As researchers develop and use methods, such as the PCI₂, in order to facilitate knowledge exchange and intellectual accessibility, it will become easier for decision makers to understand and to use research results in meaningful ways that are beneficial to them and their communities. By combining the idea of transformational learning with the cognitive approach that is frequently used in human dimensions of wildlife, it is possible to bridge the gap in understanding between human dimensions researchers and the decision makers that they work with. This in turn can produce more successful initiatives and reduce the conflict that may occur in such scenarios.

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4. Chapter Four

Final discussion of the 'Human Dimensions of the "Wolf Capital of the World" Initiative'.

The field of human dimensions of wildlife takes on a holistic view of management based on three main strategies: (1) an interdisciplinary social-science based perspective complementary to natural-science based perspectives, (2) inclusion of stakeholders, and (3) management seen as a long-term, adaptive learning process (Decker & Chase, 2013). As time has passed, the field of human dimensions has been integrated into several other fields; emerging from this project are geography, social psychology, sociology, tourism, and education. As previously mentioned, the field of human dimensions has become very important in decision-making surrounding wildlife and covers a wide range of concepts including human attitudes, human behaviours, communication within groups, social and economic values, public involvement in decision-making, and public support in decision-making (Decker & Chase, 1997). It is evident that human dimensions of wildlife is becoming increasingly relevant in the study of wildlife management, wildlife conservation, and wildlife tourism – the “Wolf Capital of the World” initiative being a prime example.

As Thompson was introducing the “Wolf Capital of the World” initiative into their community, it became necessary to understand how local residents would respond. This research project was a kick-start in developing quantitative and representative knowledge of whether or not public support exists for Spirit Way Inc. to develop the “Wolf Capital of the World” initiative, which did not previously exist. As tourism becomes increasingly competitive in the global market, careful development is key in ensuring success (Murphy, 1993; Johnston & Haider, 1993). This means that managing parties like Spirit Way Inc. need to consider this to be a community endeavour that considers impacts, and requires the consensus of its residents and relative businesses (Murphy,

1993; Decker & Chase, 1997). This is particularly relevant for communities in the north including Thompson, many of which are in a situation where their local economy is in need of diversification (Johnston & Haider, 1993). New, successful tourism initiatives, such as the “Wolf Capital of the World”, can provide several benefits to a small community given that support of a new initiative exists including a renewed sense of pride and economic diversification. Thus, it is important to consider tourism as an essential part of ensuring such an initiative’s success. The results from this research can be integrated into consideration of key issues surrounding wolves, wolf management, and the economic nature of the “Wolf Capital of the World” initiative. Awareness of the attitudes, values, and behavioral intentions of the public can guide advertising, sub-initiatives, and other aspects of the initiative. In addition, this research can be a starting point for future research regarding wildlife-related initiatives, especially as nature-based initiatives become an increasingly common source of economic development (Geffroy, 2015).

The objective of this project was based on three broad research questions:

1. How do the local residents of Thompson, Manitoba feel about wolves and about Thompson as “Wolf Capital of the World”?
2. Do differences in attitudes toward wolves and toward the “Wolf Capital of the World” initiative exist among various groups within the community (residents, visitors, and youth)?
3. Do the attitudes of local residents reflect the goals and actions of Spirit Way Inc.?

As these questions are re-visited, we can infer from the results of chapter one that the local residents of Thompson have a positive attitude toward wolves and that the existence value of wolves is the key factor in deciding whether or not to support the “Wolf Capital of the World” initiative. While the support for the initiative is not strong, it is possible for Spirit Way Inc. to increase support by considering that existence value is important to local residents as a way to create potential communication strategies, which could even emerge as a result of transformational learning.

We can also infer from the results of chapter two that differences in attitudes toward the “Wolf Capital of the World” initiative exist. However, these differences are not as we predicted – residents were slightly positive, youth were neutral, and visitors were slightly negative toward the initiative. Understanding these relationships will act as a pathway to public involvement in decision-making and will emphasize the importance of human involvement in wildlife management. The most important factor of this portion of the research was the way in which we ignite transformational learning and to use PCI₂ as a tool for increased understanding and appreciation of research results from the managing party (e.g. Spirit Way Inc.). Through these methodologies, decision makers are able to experience perspective transformation, which is core to transformational learning and is a secondary process where meaning is created by reconstruction of dominant discourse (Mezirow, 1978; Mezirow 2003). Through transformational learning, decision makers are able to have a better understanding of the baseline of Thompson residents’ attitudes, values, and behavioral intention regarding the initiative, which can be useful in predicting behaviors, and influencing future management and educational decisions (Heberlein, 1989).

As human dimensions research reaches its end, the goal of the researcher is to encourage decision makers to increase public input in management strategies and objectives (Decker & Chase, 1997). As we consider whether or not the attitudes of local residents reflect the goals and actions of Spirit Way Inc., we can think about how the most basic use of information gathered from human dimensions research is to give decision makers the chance to utilise representative interests of the public when making management decisions (Vaske & Manfredi, 2012). This response to this final question remains ambiguous as the “Wolf Capital of the World” initiative and the corresponding human dimensions research remains in its early stages. The question of whether or not the attitudes of local residents reflect the goals and actions of Spirit Way Inc. is one that will need to be revisited at various stages of the “Wolf Capital of the World” initiative and in future human dimensions research.

In addition to considering the question of the relationship between attitudes of local residents and intentions of Spirit Way Inc., there are limitations of this research that should be considered in future research:

A. In our first data collection phase, only 2% of our sample was comprised of individuals aged 19-25. Research shows that youth tend to have different attitudes, values, and beliefs than older individuals (Dalum, M., 2013). While we did attempt to catch a glimpse of youth attitudes by surveying youth in grade 11 and 12 at the local high school, this viewpoint was narrow and non-inclusive of the 19-25 age group.

B. Due to the geographical location of Thompson and the rising costs of air travel, many visitors travel to northern Manitoba via railway. Unfortunately, the railway in Manitoba is often delayed for several hours for a variety of reasons including weather, shifting

permafrost, and mechanical issues. Due to these delays, it was often impossible to interview visitors upon their arrival in Thompson before they re-boarded the train to travel further north. We attempted to mitigate this by travelling with visitors and interviewing visitors on the train to Churchill, Manitoba, however, this planned trip was also interrupted by long delays and poor weather.

C. Telephone contact was very difficult and many residents within Thompson either (a) do not use their home phone, or (b) are in a financial situation where they do not have access to home phone service. In addition, cell phone numbers were not possible to access freely at the time of the study. This made it difficult to reach residents when attempting to recruit participants for this study.

D. It was not uncommon to encounter negativity toward Spirit Way Inc., whether it be due to contradictory beliefs, miscommunication, or lack of communication. There were several community members who did not know what the “Wolf Capital of the World” initiative entailed and some who believed that the actions of Spirit Way Inc. were not of a positive nature. This made it difficult to gather participants for the study and to assure potential participants of the neutrality of the research.

Considering these limitations, following are recommendations for future research and recommendations for managers or decision-makers (e.g. Spirit Way Inc.):

1. To conduct a further, more in-depth exploration of resident attitudes, values, and behavioral intention regarding the “Wolf Capital of the World” initiative. Using a quantitative, self-administered questionnaire could be used as the primary method of data collection once again, however, it may also be useful to conduct semi-structured

interviews to gain more anecdotal information about the perceptions of the “Wolf Capital of the World”. Questions should be more focused on the “Wolf Capital of the World” rather than general questions about wolves and wolf management as the “Wolf Capital of the World” initiative is more conceptual rather than about actual wolves. Taking any recommendations seriously and then following up with residents in the future can also give insight into whether or not expectations are being met, whether or not management actions are deemed acceptable, and determine if the initiative is following a path to success.

2. An expansion of the investigation into visitor attitudes, values, and behavioral intention regarding the “Wolf Capital of the World” initiative. Starting with surrounding communities, expanding into regional, provincial, national, and international sampling populations. Again, using questions more focused on the “Wolf Capital of the World” initiative would be more appropriate. It may even be useful to ask potential visitors whether or not the “Wolf Capital of the World” initiative is something that would entice them to visit Thompson, Manitoba as well as what their expectations may be for such an initiative. Similar to residents, a follow-up with visitors can also be beneficial to determining whether or not expectations are being met and what may or may not be working for the “Wolf Capital of the World” initiative.

3. Using a different method or a variety of methods to gather information within Thompson for future studies would be beneficial. Due to the changing nature of how the public uses the telephone, it may no longer be enough to rely on phone contact. Instead, using mail, internet, or a combination of mail and telephone contact could produce better sample sizes.

4. There needs to be an improvement in relationships between Spirit Way Inc. and the local community using improved and increased communication methods, campaigning, education, and increasingly relying on public input when making management decisions regarding the “Wolf Capital of the World” initiative. This is true not only for any potential future research, but also for the success of the “Wolf Capital of the World” initiative.

This research shows that wildlife-related tourism initiatives are far more complex than a business plan. It is imperative that public input be considered when planning an initiative such as the “Wolf Capital of the World”. This is particularly true for northern communities attempting to diversify their economies.

The field of human dimensions of wildlife can be a catalyst in understanding public attitudes, values, and behavioral intention in order to understand if and how such an initiative will be successful. In addition, it is extremely beneficial for managers and/or decision-makers (e.g. Spirit Way Inc.) to understand research results, which can be integrated as transformational learning, in order to effectively use those results to benefit tourism initiatives. The purpose of this research was to understand public attitudes, beliefs, and values toward wolves and toward Thompson becoming “Wolf Capital of the World” as well as to elicit transformational learning of the results for Spirit Way Inc. The results of this project allowed for a better understanding of public attitudes, beliefs, and values toward wolves and the “Wolf Capital of the World” initiative. In addition, the use of the Potential for Conflict Index will allow Spirit Way Inc. to better understand the results produced. The results and understanding of the results will allow Spirit Way Inc. to have a broader viewpoint in understanding how most residents, visitors, and youth feel about wolves, wolf management, and the possible

implementation of the “Wolf Capital of the World” initiative in Thompson. The results from this project will help guide further educational efforts and decisions regarding the future of Thompson. This research will fill a knowledge gap within the field of Human Dimensions of Wildlife and can be integrated into the consideration of key issues surrounding wildlife, wildlife management, and wildlife-related tourism as well as bridging the gap in understanding of research results for managers. By integrating human dimensions into the “Wolf Capital of the World” initiative, a better understanding of how residents, visitors, and youth think about such an initiative has been possible. By understanding where differences and conflicts may lie, researchers, as well as managers, can address issues surrounding wolves and the “Wolf Capital of the World” initiative in addition to other wildlife and wildlife initiatives in different areas.

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